BLM LIBRARY
88047247

Soil Survey

Sevenmile Wash Area
Nye County
Nevada

Prepared For

U.S. Bureau of Land
Management
Reno, Nevada

May 1980

Contract YA-512-CT9-179

S
599.9
.N3
S484
1980

19714

Woodward-Clyde Consultants
Consulting Engineers, Geologists and Environmental Scientists
2909 West 7th Avenue, Denver, Colorado 80204

Bureau of Land Management
Library
Bldg. 50, Denver Federal Center
Denver, CO 80225

BLM LIBRARY
RS 150A BLDG. 50
DENVER FEDERAL CENTER
P.O. BOX 25047
DENVER, CO 80225

ID 88047247

2909 West 7th Avenue
P.O. Box 4036
Denver, Colorado 80204
303-573-7882

Woodward-Clyde Consultants

S
599.9
.N3
S484
1980

May 13, 1980

Bureau of Land Management
Federal Building
Room 3008
Reno, Nevada 89509

Attention: Mr. Gerald Harman
State Soil Scientist, COAR

Re: Order 3 Soil Survey, Sevenmile Wash Area, Shoshone-Eureka Resource Area, Contract YA-512-CT9-179.
Job No. 19714

Gentlemen:

We completed our Order 3 Soil Survey of the approximately 148,000 acres in the Sevenmile Wash Area and, as requested, are submitting a separate report for this portion of the Contract.

The status of this survey is field correlation, as documented by Robert Zimmerman, Nevada Soil Correlator, U.S. Soil Conservation Service.

A total of 42 different soil map units were delineated as associations. These associations are comprised of 34 soil series. Eleven soil series were proposed for establishment from this survey.

Soils of the survey area were generally divided into four general classes according to topography depth and drainage as follows: (1) soils on mountains that are dominantly very steeply sloping, shallow and deep and very poorly drained and well drained; (2) soils on terraces and midslopes that are nearly level to very steep, shallow and deep and well drained; (3) soils on fans that are nearly level to steep, shallow and deep and well drained; and (4) soils on floodplains that are level to nearly level, deep and well drained.

BLM LIBRARY
RS 150A BLDG. 50
DENVER FEDERAL CENTER
P.O. BOX 25047
DENVER, CO 80225

This soil survey delineated soils in correlation with vegetation communities. Standard Soil Conservation Service interpretations were made from field data and information.

If you have questions, please call.

Yours truly,

Ralph E. Luebs
Chief, Land Resources Division

Reviewed by:

Frank J. Holliday
Vice President

REL:jms

Soil Survey

Bureau of Land Management
Library
Bldg. 50, Denver Federal Center
Denver, CO 80225

Sevenmile Wash Area
Nye County
Nevada

Prepared For

U.S. Bureau of Land
Management
Reno, Nevada

May 1980

Contract YA-512-CT9-179

Woodward-Clyde Consultants

Consulting Engineers, Geologists and Environmental Scientists
2909 West 7th Avenue, Denver, Colorado 80204

Job No. 19714

TABLE OF CONTENTS

	PAGE
INTRODUCTION	1
GENERAL DESCRIPTION OF AREA	1
Climate	1
Physiography Relief and Drainage	2
GENERAL SOIL DESCRIPTION	4
Soils on mountains that are dominantly very steeply sloping, shallow and deep and very poorly drained and well drained	4
Soils on terraces and sideslopes nearly level to very steep, shallow and deep and well drained	5
Soils on fans that are nearly level to steep, shallow and deep and well drained	5
Soils on Floodplains that are level to nearly level, deep and well drained	5
SOIL MAP UNIT IDENTIFICATION LEGEND	6
CONVENTIONAL AND SPECIAL SYMBOLS LEGEND	21
TYPIFYING PEDON DESCRIPTIONS	22
Ados Series	22
Ansping Series	24
Applebush Series	26
Bucan Variant	28
Buster Series	30
Dobrow Series	32
Fishlake Series	34
Four Star Series	35
Hackwood Variant	38
Harcany Series	40
Hopeka Series	41
Hymas Series	42
Labschaft Series	44
Locane Series	45

TABLE OF CONTENTS
(Continued)

	PAGE
Moonshine Series	46
Mulligan Series	48
Muni Series	50
Ney Series	52
Packham Variant	53
Pedoli Series	55
Pernty Series	57
Punchbowl Series	58
Roca Series	60
Secret Creek Series	62
Segura Series	63
Sevenmile Series	65
Shagnasty Series	67
Shipley Series	69
Shreek Series	71
Udelope Series	73
Umil Series	74
Usine Series	76
Vinini Series	77
Winu Series	79
CLASSIFICATION AND SERIES STATUS	81
ACREAGE AND PROPORTIONATE EXTENT OF SOIL MAP UNITS	83
CREDITS	84
REFERENCES	85
GLOSSARY	86

FIGURE 1 - GENERAL SOIL MAP-SEVENMILE WASH, NYE COUNTY, NEVADA

TABLE I - AREA AND PROPORTIONATE EXTENT OF SOIL MAP UNITS

APPENDIX A - MAP UNIT DESCRIPTION AND INTERPRETATION FORMS

APPENDIX B - RANGE SITE DESCRIPTIONS

SOIL SURVEY
SEVENMILE WASH AREA
NYE COUNTY, NEVADA

INTRODUCTION

Woodward-Clyde Consultants performed an Order 3 Soil Survey of the designated Sevenmile Wash Area in the Shoshone-Eureka Resource Area of Nevada for the Bureau of Land Management. Field work on approximately 148,000 acres was completed in December 1979. Field reviews and field correlations were done in cooperation with the U.S. Soil Conservation Service, which had quality assurance responsibility.

The status of the soil correlation for this soil survey is field correlation and this report has been prepared to be consistent with this field correlation.

GENERAL DESCRIPTION OF AREA

Climate

The Sevenmile Wash survey area is in central Nevada, in the northern part of Nye County. The climate is semi-arid, with cold winters and hot dry summers. Climatic parameters are primarily influenced by topography. The Antelope Mountain Range generally extends in a north-south direction on the east side of the area. This range has peaks as high as 10,000 feet above sea level. To the east and west of the Antelope Range the topography consists of terraces, fans, and floodplains.

Elevation of these areas range from approximately 6,500 to 7,500 feet above sea level.

There are three precipitation zones within the survey area resulting from topographic differences. In the valleys and bottomlands (elevation 6,500 to 7,500 feet) the annual precipitation ranges from 5 to 12 inches; in the terraces and fans of the valley edges (elevation 6,500 to 8,000 feet) the annual precipitation ranges from 12 to 16 inches; in the high mountains (elevation 8,000 feet) the precipitation ranges from 16 to 22 inches. Most of the precipitation comes during the winter and spring.

The average annual air temperature for elevations below 8,000 feet is 50°F., and above 8,000 feet is 37°F. The average annual soil temperature below 8,000 feet is 46°F. The average annual soil temperature above 8,000 feet is 44°F.

The frost-free season for the entire survey area is approximately 75 days.

Physiography Relief and Drainage

The Sevenmile Wash area is located approximately 40 miles southwest of Eureka, Nevada in Nye County. Several distinct physiographic areas occur within the Sevenmile Wash Area. The Antelope Mountain Range extends in a north-south direction on the east portion of the survey area. Paralleling the Antelope Range to the east and west are mountain terraces, fans and

floodplains. Elevations within the area range from 6,500 feet in the floodplains to 10,000 feet in the mountains.

Soils in the Antelope Mountain Range have developed on andesitic, tuffaceous volcanic material and limestone bedrock. These soils are generally less than 20 inches to hard bedrock. Slopes are generally 8 to 30 percent and over 50 percent on mountain sideslopes, canyons and ridges. Elevations for the mountains range from approximately 7,500 to 10,000 feet.

Soils on the valley terraces have formed in place and through alluvial action. The primary soil parent materials consist of gabbro, tuff and calcareous alluvial material. These valley terraces are geologically old, dissected and generally have a duripan within 20 inches of the surface. Slopes generally range from 2 to 30 percent. Slopes steeper than 30 percent occur on sideslopes of dissected terraces. Elevation range for the mountain terraces is between 6,600 and 8,000 feet.

Soils on the fans have formed in more recent calcareous alluvium. These fans are moderately to severely dissected. These soils may or may not have a duripan within 20 inches of the surface. Slopes are generally 2 to 8 percent and may be greater than 8 percent on sideslope dissections. Elevations for the fans range from 6,600 to 7,500 feet.

Soils on the floodplains are deep and formed in recent calcareous alluvium. These soils are on level to nearly level

flats, basins, arroyos, and bottomlands with slopes generally ranging from 0 to 4 percent. Elevations for the floodplains range between 6,500 and 7,000 feet.

Drainage to the east of the Antelope Range and north of Crested Wheat Ridge flows via small tributaries into Little Smokey Valley. Drainage on the east side south of Crested Wheat Ridge flows south into Hot Creek Valley. Drainage to the west of the Antelope Range and south of the Cabin Spring divide flows via small tributaries to Dry Valley, Sevenmile Wash and Little Fishlake Valley. North of Cabin Spring divide, flow is north into Antelope Valley.

GENERAL SOIL DESCRIPTION

A general soil map of the Sevenmile Wash Area was constructed from the Order 3 Soil Survey (Figure 1). Brief descriptions of soils in broad categories based on topography, depth and drainage are given below.

Soils on mountains that are dominantly very steeply sloping, shallow and deep and very poorly drained and well drained

Ney-Mulligan-Udelope. These are loamy and loamy-skeletal soils that are deep and shallow to igneous bedrock, well drained and have a cryic temperature regime; formed in colluvium and residuum derived from andesite and tuff.

Segura-Pernty. These are loamy, loamy-skeletal and fine soils that are shallow and moderately deep to igneous bedrock well drained and have a frigid temperature regime; formed in residuum and colluvium derived from andesite.

Soils on terraces and sideslopes nearly level to very steep, shallow and deep and well drained

Pedoli-Moonshine-Shreek. These are loamy, clayey and clayey-skeletal soils that are shallow to a duripan or deep, and well drained; formed in calcareous alluvium.

Punchbowl-Segura-Locane. These are loamy, clayey and clayey-skeletal soils that are shallow to bedrock and well drained; formed in residuum and colluvium derived from andesite and tuff. Included are some soils formed in residuum on limestone.

Soils on fans that are nearly level to steep, shallow and deep and well drained

Umil-Vinini-Buster. These are loamy and loamy-skeletal soils that are nearly level and undulating, shallow to a duripan or deep and well drained; formed in calcareous alluvium.

Umil-Pedoli-Fishlake. These are loamy soils that are undulating to steep, shallow to a duripan or deep, and well drained; formed in calcareous alluvium.

Soils on Floodplains that are level to nearly level, deep and well drained

Sevenmile-Shipley. These are loamy, soils that are level and nearly level, deep and well drained; formed in recent calcareous alluvium.

SOIL MAP UNIT IDENTIFICATION LEGEND

Rock outcrop-Punchbowl association (Map Symbol 111)

Rock outcrop, andesite (70%)
Punchbowl sandy loam, 4 to 5 percent slopes (25%); Range site: Shallow loamy, 8 to 12-inch P.Z. (D-28-11)
Inclusions:
Xeric Torriorthents, loamy-skeletal, mixed (calcareous), frigid, 15 to 30 percent slopes (5%); Range site: Shallow hill, 8 to 12-inch P.Z. (D-28-16)

Umil-Fishlake association (Map Symbol 121)

Umil loam, 2 to 15 percent slopes (60%); Range site: Shallow loamy, 8 to 12-inch P.Z. (D-28-11)
Fishlake sandy loam, 2 to 8 percent slopes (30%); Range site: Shallow loamy, 8 to 12-inch P.Z. (D-28-11)
Inclusions:
Xeric Torriorthents, coarse-loamy, mixed (calcareous), frigid, 2 to 8 percent slopes (8%); Range Site: Loamy, 8 to 10-inch P.Z. (D-28)
Xeric Torriorthents, loamy-skeletal, mixed (calcareous), frigid, 8 to 15 percent slopes (2%); Range site: Loamy, 8 to 10-inch P.Z. (D-28)

Umil loam (Map Symbol 123)

Umil loam, 2 to 8 percent slopes; Range site: Shallow loamy, 8 to 12-inch P.Z. (D-28-11)
Inclusions:
Xeric Torriorthents, coarse-loamy, mixed (calcareous), frigid, 4 to 8 percent slopes (3%); Range site: Loamy, 8 to 10-inch P.Z. (D28)
Shipley loam, 0 to 4 percent slopes (2%); Range site: Silty, 8 to 12-inch P.Z. (D-28-13)

Umil-Applebush association (Map Symbol 124)

Umil loam, 2 to 4 percent slopes (75%); Range site: Shallow loamy, 8 to 12-inch P.Z. (D-28-11)
Applebush sandy loam, 2 to 4 percent slopes (15%); Range site: Loamy, 8 to 10-inch P.Z. (D-28)
Inclusions:
Xeric Torriorthents, coarse-loamy and sandy, mixed (calcareous), frigid, 2 to 4 percent slopes (4%); Range Site: Loamy, 8 to 10-inch P.Z. (D-28)
Fishlake sandy loam, 2 to 4 percent slopes (5%); Range site: Shallow loamy, 8 to 12-inch P.Z. (D-28)
Xeric Durorthids, loamy, mixed, frigid, shallow, 0 to 2 percent slopes, moist (1%); Range site: Loamy, 8 to 10-inch P.Z. (D-28)

Umil-Vinini-Buster association (Map Symbol 125)

Umil loam, 2 to 4 percent slopes (55%); Range site: Shallow loamy, 8 to 12-inch P.Z. (D-28-11)
Vinini gravelly loam, 8 to 15 percent slopes (25%); Range site: Shallow loamy, 8 to 12-inch P.Z. (D-28-11)
Buster sandy loam, 0 to 2 percent slopes)15%); Range site: Loamy, 8 to 10-inch P.Z. (D-28)
Inclusions:
Xeric Torriorthents, coarse-loamy, mixed (calcareous), frigid, 2 to 4 percent slopes (3%); Range Site: Loamy, 8 to 10-inch P.Z. (D-28)
Usine gravelly sandy loam, 15 to 30 percent slopes (2%); Range site: Shallow Hill, 8 to 12-inch P.Z. (D-28-16)

Umil-Buster-Muni association (Map Symbol 127)

Umil loam, 8 to 30 percent slopes (60%); Range site: Shallow loamy, 8 to 12-inch P.Z. (D-28-11)
Buster gravelly loam, 2 to 8 percent slopes, dry (20%); Range site: Shallow loamy, 8 to 12-inch P.Z. (D-28-11)
Muni sandy loam, 0 to 8 percent slopes, moist (15%); Range site: Juniper Savanna, 11 to 16-inch P.Z. (D-28)
Inclusions:
Aridic and Pachic Haploxerolls, coarse-loamy, mixed, frigid, 2 to 4 percent slopes (3%); Range site: Loamy bottom, 5 to 12-inch P.Z. (D-28-3)
Xeric Torriorthents, coarse-loamy, mixed (calcareous), frigid, 15 to 30 percent slopes (2%); Range Site: Hill, 8 to 12-inch P.Z. (D-28-12)

Sevenmile-Applebush association (Map Symbol 131)

Sevenmile silt loam, 0 to 2 percent slopes (85%); Range site: Loamy bottom, 5 to 12-inch P.Z. (D-28-3)
Applebush sandy loam, 0 to 4 percent slopes (15%); Range site: Loamy, 8 to 10-inch P.Z. (D-28)

Sevenmile association (Map Symbol 132)

Sevenmile silt loam, 0 to 2 percent slopes, wet (80%); Range site: Wet meadow, 5 to 12-inch P.Z. (D-28-1)
Sevenmile silt loam, 0 to 4 percent slopes (19%); Range site: Loamy bottom, 5 to 12-inch P.Z. (D-28-3)
Inclusions:
Xeric Torriorthents, sandy, mixed, frigid, 0 to 2 percent slopes (1%); Range Site: Wash, 5 to 12-inch P.Z. (D-28-9)

Applebush sandy loam association (Map Symbol 141)

Applebush sandy loam, 0 to 2 percent slopes, flooded; Range site: Loamy bottom, 5 to 12-inch P.Z. (D-28-3)
Inclusions:
Xeric Torriorthents, coarse-loamy, mixed (calcareous), frigid, 0 to 2 percent slopes (9%); Range Site: Loamy, 8 to 10-inch P.Z. (D-28)
Xeric Torriorthents, sandy-skeletal, mixed, frigid, 0 to 2 percent slopes, flooded (6%); Range site: Wash, 5 to 12-inch P.Z. (D-28-9)

Fishlake-Pedoli association (Map Symbol 162)

Fishlake sandy loam, 2 to 4 percent slopes (50%); Range site: Shallow loamy, 8 to 12-inch P.Z. (D-28-11)
Pedoli sandy loam, 0 to 4 percent slopes (40%);Range site: Loamy, 8 to 10-inch P.Z. (D-28)
Inclusions:
Xeric Torriorthents, coarse-loamy and sandy, mixed (calcareous), frigid, 0 to 4 percent slopes, flooded (5%); Range Site: Loamy bottom, 5 to 12-inch P.Z. (D-28-3)
Four Star soils, 0 to 4 percent slopes (1%); Range site: Wet meadow, 5 to 12-inch P.Z. (D-28-1)
Applebush sandy loam, 2 to 8 percent slopes (4%); Range site: Loamy, 8 to 10-inch P.Z. (D-28)

Fishlake-Buster association (Map Symbol 163)

Fishlake sandy loam, 2 to 4 percent slopes (50%); Range site: Shallow loamy, 8 to 12-inch P.Z. (D-28-11)
Buster sandy loam, 2 to 4 percent slopes, dry (40%); Range site: Shallow loamy, 8 to 12-inch P.Z. (D-28-11)
Inclusions:
- Usine gravelly loam, 15 to 30 percent slopes (5%); Range site: Shallowhill, 8 to 12-inch P.Z. (D-28-16)
- Applebush sandy loam, 2 to 4 percent slopes, flooded (5%); Range site: Loamy bottom, 5 to 12-inch P.Z. (D-28-3)

Fishlake-Pedoli-Umil association (Map Symbol 164)

Fishlake sandy loam, 2 to 4 percent slopes (50%); Range site: Shallow loamy, 8 to 12-inch P.Z. (D-28-11)
Pedoli sandy loam, 4 to 15 percent slopes (25%);Range site: Loamy, 8 to 10-inch P.Z. (D-28)
Umil loam, 2 to 15 percent slopes (20%); Range site: Shallow loamy, 8 to 12-inch P.Z. (D-28-11)
Inclusions:
- Xeric Torriorthents, coarse-loamy, mixed (calcareous), frigid, 0 to 4 percent slopes (5%); Range Site: Loamy, 8 to 10-inch P.Z. (D-28)

Ney-Mulligan-Udelope association (Map Symbol 171)

Ney stony loam, 30 to 50 percent slopes (45%); Range site: Claypan, 12 to 18-inch P.Z. (D-28)
Mulligan loam, 15 to 50 percent slopes (27%); Range site: Loamy, 16 to 22-inch P.Z. (D-28)
Udelope stony loam, 30 to 50 percent slopes (12%); Range site: Mahogany savanna, 16 to 22-inch P.Z. (D-28)
Inclusions:
- Rock outcrop, andesite (7%)
- Cryoquolls, 2 to 8 percent slopes (3%); Range site: Wet meadow, 12 to 25-inch P.Z. (D-28)
- Hackwood Variant loam, 4 to 30 percent slopes (4%); Range site: Aspen woodland (D-28)
- Pachic Cryoborolls, loamy-skeletal, mixed, 8 to 15 percent slopes (2%); Range site: Mahogany thickets, 16 to 22-inch P.Z. (D-28)

Ney-Pernty-Mulligan association (Map Symbol 172)

Ney stony loam, 8 to 50 percent slopes (50%); Range site: Claypan, 12 to 18-inch P.Z. (D-28)
Pernty extremely stony loam, 30 to 50 percent slopes (15%); Woodland site: Pinyon-Juniper-big sagebrush (D-28)
Mulligan loam, 8 to 30 percent slopes (15%); Range site: Loamy, 16 to 22-inch P.Z. (D-28)
Inclusions:
- Rock outcrop, andesite (7%)
- Udelope stony loam, 8 to 30 percent slopes (8%); Range site: Mahogany savanna, 16 to 22-inch P.Z. (D-28)
- Lithic Cryoborolls, loamy-skeletal, mixed, 2 to 30 percent slopes (5%); Range site: Mountain ridge, 12 to 18-inch P.Z. (D-28)

Buster-Shreek association (Map Symbol 182)

Buster sandy loam, 8 to 30 percent slopes, moist (60%); Range site: Loamy, 10 to 12-inch P.Z. (D-28)
Shreek clay loam, 15 to 30 percent slopes (27%); Woodland site: Pinyon-Juniper-big sagebrush (D-28)
Inclusions:
- Xerollic Durorthids and Xerollic Durargids, loamy, mixed, frigid, shallow, 2 to 8 percent slopes (8%); Range site: Shallow loamy, 8 to 12-inch P.Z. (D-28-11)
- Applebush sandy loam, 2 to 8 percent slopes (3%); Range site: Loamy, 8 to 12-inch P.Z. (D-28)
- Secret Creek loam, 2 to 8 percent slopes (2%); Range site: Loamy, 10 to 12-inch P.Z. (D-28)

Pedoli-Shipley association (Map Symbol 191)

Pedoli sandy loam, 2 to 4 percent slopes (85%);Range site: Loamy, 8 to 10-inch P.Z. (D-28)
Shipley loam, 0 to 4 percent slopes (13%); Range site: Silty, 8 to 12-inch P.Z. (D-28-13)
Inclusions:
- Applebush sandy loam, 0 to 2 percent slopes (1%); Range site: Loamy, 8 to 10-inch P.Z. (D-28)
- Secret Creek loam, 0 to 2 percent slopes (1%); Range site: Loamy, 8 to 10-inch P.Z. (D-28)

Pedoli-Buster-Applebush association (Map Symbol 192)

Pedoli sandy loam, 2 to 4 percent slopes (55%); Range site: Loamy, 8 to 10-inch P.Z. (D-28)
Buster sandy loam, 2 to 8 percent slopes (25%); Range site: Loamy, 8 to 10-inch P.Z. (D-28)
Applebush sandy loam, 0 to 4 percent slopes (15%): Range site: Loamy, 8 to 10-inch P.Z. (D-28)
Inclusions:
Punchbowl sandy loam, 4 to 15 percent slopes (2%); Range site: Shallow loamy, 8 to 12-inch P.Z. (D-28-11)
Xeric Torriorthents, coarse-loamy and loamy-skeletal, mixed, frigid, 2 to 8 percent slopes (3%); Range site: Loamy, 8 to 10-inch P.Z. (D-28)

Pedoli-Applebush association (Map Symbol 193)

Pedoli sandy loam, 2 to 8 percent slopes, moist (73%); Range site: Loamy, 10 to 12-inch P.Z. (D-28)
Applebush sandy loam, 2 to 4 percent slopes, moist (12%); Range site: Loamy, 10 to 12-inch P.Z. (D-28)
Inclusions:
Muni sandy loam, 2 to 4 percent slopes, moist (8%); Range site: Juniper Savanna, 11 to 16-inch P.Z. (D-28)
Xeric Torriorthents, coarse-loamy, mixed (calcareous), frigid, 8 to 30 percent slopes (7%); Range Site: Loamy, 10 to 12-inch P.Z. (D-28)

Pedoli-Muni-Punchbowl association (Map Symbol 194)

Pedoli sandy loam, 2 to 8 percent slopes, moist (40%); Range site: Loamy, 10 to 12-inch P.Z. (D-28)
Muni sandy loam, 2 to 8 percent slopes (35%); Range site: Loamy, 10 to 12-inch P.Z. (D-28)
Punchbowl sandy loam, 4 to 15 percent slopes (15%); Range site: Shallow loamy, 8 to 12-inch P.Z. (D-28-11)
Inclusions:
Xeric Torriorthents, coarse-loamy, mixed (calcareous), frigid, 8 to 30 percent slopes (6%); Range Site: Loamy, 8 to 10-inch P.Z. (D-28)
Secret Creek loam, 2 to 4 percent slopes (2%); Range site: Loamy, 10 to 12-inch P.Z. (D-28)
Applebush sandy loam, 2 to 4 percent slopes, moist (2%); Range site: Loamy, 10 to 12-inch P.Z. (D-28)

Pedoli-Shreek-Locane association (Map Symbol 195)

Pedoli sandy loam, 4 to 15 percent slopes, high elevation (46%); Woodland site: Pinyon-Juniper-big sagebrush (D-28)
Shreek clay loam, 8 to 30 percent slopes (30%); Woodland site: Pinyon-Juniper-big sagebrush (D-28)
Locane extremely stony loam, 8 to 30 percent slopes (20%); Woodland site: Pinyon-Juniper-big sagebrush (D-28)
Inclusions:
Rock outcrop, andesite (2%)
Xeric Torriorthents, coarse-loamy and loamy-skeletal, mixed (calcareous), frigid, 2 to 8 percent slopes (2%); Range Site: Loamy, 10 to 12-inch P.Z. (D-28)

Hackwood Variant-Harcany-Mulligan association (Map Symbol 201)

Hackwood Variant loam, 4 to 15 percent slopes (40%); Woodland site: Aspen woodland (D-28)
Harcany gravelly loam, 4 to 30 percent slopes, dry (25%); Range site: Mountain ridge, 12 to 18-inch P.Z. (D-28)
Mulligan loam, 4 to 15 percent slopes (15%); Range site: Loamy, 16 to 22-inch P.Z. (D-28)
Inclusions:
Udelope loam, 8 to 30 percent slopes (9%); Range site: Mahogany savanna, 16 to 22-inch P.Z. (D-28)
Typic Cryoquolls, coarse-loamy, mixed, 4 to 15 percent slopes (1%); Range site: Wet meadow, 12 to 25-inch P.Z. (D-28)
Pachic Cryoborolls, loamy-skeletal, mixed, 8 to 30 percent slopes (7%); Range site: Claypan, 12 to 18-inch P.Z. (D-28)
Rock outcrop, andesite (3%)

Segura-Pernty complex (Map Symbol 211)

Segura, extremely stony sandy loam, 8 to 50 percent slopes (58%); Woodland site: Pinyon-Juniper-big sagebrush (D-28)
Pernty extremely stony loam, 8 to 50 percent slopes (25%); Woodland site: Pinyon-Juniper-big sagebrush (D-28)
Inclusions:
Udelope sandy loam, 8 to 30 percent slopes (9%); Range site: Mahogany savanna, 16 to 22-inch P.Z. (D-28)
Pachic Haploxerolls, coarse-loamy and loamy-skeletal, mixed, frigid, 4 to 8 percent slopes (4%); Range site: Loamy, 12 to 16-inch P.Z. (D-28)
Aquolls, 1 to 4 percent slopes (1%); Range site: Wet meadow, 8 to 16-inch P.Z. (D-25)
Rock outcrop, andesite (3%)

Segura-Pernty-Rock outcrop complex (Map Symbol 212)

Segura, extremely stony sandy loam, 8 to 50 percent slopes (40%); Woodland site: Pinyon-Juniper-big sagebrush (D-28)
Pertny extremely stony loam, 8 to 50 percent slopes (34%); Woodland site: Pinyon-Juniper-big sagebrush (D-28)
Rock outcrop, andesite (13%)
Inclusions:
- Udelope stony loam, 8 to 50 percent slopes (9%); Range site: Mahogany savanna, 16 to 22-inch P.Z. (D-28)
- Pachic Haploxerolls, coarse-loamy, mixed, frigid, 2 to 8 percent slopes (3%); Range site: Loamy, 12 to 16-inch P.Z. (D-28)
- Aquolls, 1 to 4 percent slopes (1%); Range site: Wet meadow, 8 to 16-inch P.Z. (D-25-5)

Segura-Punchbowl-Locane association (Map Symbol 213)

Segura, extremely stony sandy loam, 8 to 30 percent slopes (50%); Woodland site: Pinyon-Juniper-big sagebrush (D-28)
Punchbowl sandy loam, 8 to 30 percent slopes (23%); Range site: Juniper savanna, 11 to 16-inch P.Z. (D-28)
Locane extremely stony loam, 8 to 30 percent slopes, dry (14%); Range site: Shallow loamy, 8 to 12-inch P.Z. (D-28-11)
Inclusions:
- Fishlake sandy loam, 2 to 15 percent slopes (4%); Range site: Shallow loamy, 8 to 12-inch P.Z. (D-28-11)
- Umil loam, 2 to 15 percent slopes (4%); Range site: Shallow loamy, 8 to 12-inch P.Z. (D-28-11)
- Xeric Torriorthents, coarse-loamy, mixed (calcareous), frigid, 2 to 8 percent slopes, flooded (5%); Range Site: Wash, 5 to 12-inch P.Z. (D-28-9)

Usine-Fishlake-Umil association (Map Symbol 241)

Usine gravelly loam, 15 to 30 percent slopes (40%); Range site: Shallow hill, 8 to 12-inch P.Z. (D-28-16)
Fishlake sandy loam, 2 to 8 percent slopes (25%); Range site: Shallow loamy, 8 to 12-inch P.Z. (D-28-11)
Umil loam, 2 to 8 percent slopes (25%); Range site: Shallow loamy, 8 to 12-inch P.Z. (D-28-11)
Inclusions:
Pedoli sandy loam, 2 to 8 percent slopes (5%);Range site: Loamy, 8 to 10-inch P.Z. (D-28)
Xeric Torriorthents, coarse-loamy, mixed (calcareous), frigid, 2 to 15 percent slopes (5%); Range Site: Loamy, 8 to 10-inch P.Z. (D-28)

Shipley loam (Map Symbol 261)

Shipley loam, 0 to 4 percent slopes; Range site: Silty, 8 to 12-inch P.Z. (D-28-13)
Inclusions:
Sevenmile loam, 0 to 2 percent slopes (5%); Range site: Wash, 5 to 12-inch P.Z. (D-28-9)
Applebush sandy loam, 0 to 4 percent slopes (5%); Range site: Loamy, 8 to 10-inch P.Z. (D-28)

Dobrow loam (Map Symbol 281)

Dobrow loam, 2 to 4 percent slopes; Range site: Wet meadow, 12 to 25-inch P.Z. (D-28)
Inclusions:
Typic Cryaquolls, loamy-skeletal, mixed, 2 to 4 percent slopes (9%); Range site: Wet meadow, 12 to 25-inch P.Z. (D-28)

Bucan Variant-Locane-Segura association (Map Symbol 291)

Bucan Variant stony silty clay loam, 4 to 30 percent slopes (40%); Woodland site: Pinyon-Juniper-big sagebrush (D-28)
Locane extremely stony loam, 15 to 50 percent slopes (30%); Woodland site: Pinyon-Juniper-big sagebrush (D-28)
Segura extremely stony sandy loam, 15 to 50 percent slopes (20%); Woodland site: Pinyon-Juniper-big sagebrush (D-28)
Inclusions:
- Lithic Xeric Torriorthents, loamy and loamy-skeletal, mixed, frigid, 8 to 50 percent slopes (6%); Range Site: Shallow hill, 8 to 12-inch P.Z. (D-28-16)
- Rock outcrop, andesite (2%)
- Xeric Torriorthents and Xerollic Camborthids, coarse-loamy, mixed (calcareous), frigid, 2 to 8 percent slopes (2%); Range Site: Wash, 5 to 12-inch P.Z. (D-28-9)

Shreek-Vinini association (Map Symbol 310)

Shreek clay loam, 2 to 8 percent slopes, low precipitation (60%); Range site: Juniper savanna, 11 to 16-inch P.Z. (D-28)
Vinini gravelly loam, 0 to 2 percent slopes (25%); Range site: Shallow loamy, 8 to 12-inch P.Z. (D-28-11)
Inclusions:
- Buster sandy loam, 2 to 4 percent slopes, dry (8%); Range site: Shallow loamy, 8 to 12-inch P.Z. (D-28-11)
- Applebush sandy loam, 2 to 4 percent slopes (5%); Range site: Shallow loamy, 8 to 12-inch P.Z. (D-28)
- Xeric Torriorthents, coarse-loamy, mixed (calcareous), frigid, 2 to 8 percent slopes (2%); Range Site: Wash, 5 to 12-inch P.Z. (D-28-9)

Shreek clay loam (Map Symbol 311)

Shreek clay loam, 8 to 30 percent slopes (27%); Woodland site: Pinyon-Juniper-big sagebrush (D-28)
Inclusions:
Xeric Torriorthents, coarse-loamy and sandy, mixed (calcareous), frigid, 0 to 4 percent slopes (5%); Range Site: Wash, 5 to 12-inch P.Z. (D-28-9)

Hopeka-Ados-Rock outcrop association (Map Symbol 330)

Hopeka very gravelly loam, 15 to 30 percent slopes (45%); Woodland site: Pinyon-Juniper-black sagebrush (D-28)
Ados gravelly loam, 4 to 15 percent slopes (25%); Woodland site: Pinyon-Juniper-black sagebrush (D-28)
Rock outcrop, limestone (15%)
Inclusions:
Aridic Durixerolls, 8 to 30 percent slopes (8%); Woodland site: Pinyon-Juniper-big sagebrush (D-28)
Xeric Torriorthents, loamy-skeletal and coarse-loamy, mixed (calcareous) and carbonatic, 2 to 8 percent slopes (4%); Range Site: Loamy, 10 to 12-inch P.Z. (D-28)
Xeric Torriorthents, loamy-skeletal, carbonatic, frigid, 4 to 15 percent slopes (3%); Range Site: Shallow loamy, 8 to 12-inch P.Z. (D-28-11)

Hopeka-Packham Variant association (Map Symbol 331)

Hopeka cobbly loam, 15 to 50 percent slopes (55%); Woodland site: Pinyon-Juniper-black sagebrush (D-28)
Packham Variant very gravelly loam, 30 to 50 percent slopes (25%); Range site: Juniper savanna, 11 to 16-inch P.Z. (D-28)
Inclusions:
Xerollic Paleorthids, loamy-skeletal, carbonatic, frigid, 8 to 30 percent slopes (8%); Range site: Shallow hill, 8 to 12-inch P.Z. (D-28-16)
Pachic Haploxerolls, loamy-skeletal, carbonatic, frigid, 4 to 15 percent slopes (5%); Range site: Loamy, 12 to 16-inch P.Z. (D-28)
Aridic Haploxerolls, coarse-loamy, carbonatic, frigid, 30 to 50 percent slopes (5%); Woodland site: Pinyon-Juniper-big sagebrush (D-28)
Rock outcrop, limestone (2%)

Punchbowl-Segura-Locane association (Map Symbol 360)

Punchbowl sandy loam, 8 to 30 percent slopes, moist (42%); Range site: Juniper savanna, 11 to 16-inch P.Z. (D-28)
Segura extremely stony sandy loam, 15 to 50 percent slopes (30%); Woodland site: Pinyon-Juniper-big sagebrush (D-28)
Locane extremely stony loam, 8 to 30 percent slopes (15%); Woodland site: Pinyon-Juniper-big sagebrush (D-28)
Inclusions:
Rock outcrop, andesite (3%)
Aridic and Pachic Haploxerolls, coarse-loamy, mixed frigid, 2 to 8 percent slopes (8%); Range site: Loamy, 10 to 12-inch P.Z. (D-28)
Xeric Torriorthents, coarse-loamy, mixed (calcareous), frigid, 2 to 4 percent slopes, flooded (2%); Range Site: Loamy bottom, 5 to 12-inch P.Z. (D-28-3)

Punchbowl-Locane-Pedoli association (Map Symbol 362)

Punchbowl sandy loam, 15 to 50 percent slopes, moist (40%); Range site: Juniper savanna, 11 to 16-inch P.Z. (D-28)
Locane extremely stony loam, 15 to 50 percent slopes (35%); Woodland site: Pinyon-Juniper-big sagebrush (D-28)
Pedoli sandy loam, 4 to 15 percent slopes, moist (12%);Range site: Loamy, 10 to 12-inch P.Z. (D-28)
Inclusions:
Haploxerollic Durorthids and Durargids, loamy, mixed, frigid, shallow, 4 to 15 percent slopes (8%); Range site: Shallow loamy, 8 to 12-inch P.Z. (D-28-11)
Xeric Torriorthents and Xerollic Camborthids, coarse-loamy, mixed (calcareous), frigid, 2 to 8 percent slopes (5%); Range Site: Loamy, 10 to 12-inch P.Z. (D-28)

Punchbowl-Fishlake association (Map Symbol 363)

Punchbowl sandy loam, 8 to 30 percent slopes, moist (40%); Range site: Shallow hill, 8 to 12-inch P.Z. (D-28-16)
Fishlake loam, 8 to 15 percent slopes (40%); Range site: Shallow loamy, 8 to 12-inch P.Z. (D-28-11)
Inclusions:
Rock outcrop, andesite (5%)
Lithic Xerollic Haplargids, loamy and loamy-skeletal, mixed, frigid, 8 to 30 percent slopes, moist (3%); Range site: Juniper savanna, 11 to 16-inch P.Z. (D-28)

Punchbowl-Locane association (Map Symbol 364)

Punchbowl sandy loam, 8 to 50 percent slopes (45%); Range site: Shallow hill, 8 to 12-inch P.Z. (D-28-16)
Punchbowl sandy loam, 15 to 50 percent slopes, moist (25%); Range site: Juniper savanna, 11 to 16-inch P.Z. (D-28)
Locane extremely stony loam, 15 to 50 percent slopes (15%); Woodland site: Pinyon-Juniper-big sagebrush (D-28)
Inclusions:
Pedoli sandy loam, 4 to 15 percent slopes, moist (10%); Range site: Loamy, 10 to 12-inch P.Z. (D-28)
Sevenmile silt loam, 2 to 4 percent slopes (3%); Range site: Loamy bottom, 5 to 12-inch P.Z. (D-28-3)
Four Star sandy loam, 0 to 4 percent slopes (2%); Range site: Wet meadow, 5 to 12-inch P.Z. (D-28-1)

Four Star-Sevenmile association (Map Symbol 371)

Four Star sandy loam, 0 to 2 percent slopes (80%); Range site: Wet meadow, 8 to 16-inch P.Z. (D-25-5)
Sevenmile silt loam, 0 to 4 percent slopes (15%); Range site: Loamy bottom, 5 to 12-inch P.Z. (D-28-3)
Inclusions:
Applebush sandy loam, 2 to 4 percent slopes (3%); Range site: Loamy, 8 to 10-inch P.Z. (D-28)
Xeric Torriorthents, sandy and coarse-loamy, mixed (calcareous), frigid, 0 to 4 percent slopes, flooded (2%); Range Site: Wash, 5 to 12-inch P.Z. (D-28-9)

Moonshine-Fishlake-Umil association (Map Symbol 401)

Moonshine gravelly find sandy loam, 2 to 4 percent slopes (50%); Woodland site: Pinyon-Juniper-black sagebrush (D-28)
Fishlake sandy loam, 2 to 8 percent slopes, moist (20%); Range site: Juniper savanna, 11 to 16-inch P.Z. (D-28)
Umil loam, 4 to 15 percent slopes (17%); Range site: Shallow loamy, 8 to 12-inch P.Z. (D-28-11)
Inclusions:
- Xeric Torriorthents, coarse-loamy, mixed (calcareous), frigid, 2 to 4 percent slopes (3%); Range Site: Loamy, 8 to 10-inch P.Z. (D-28)
- Punchbowl sandy loam, 4 to 15 percent slopes, moist (3%); Range site: Juniper savanna, 11 to 16-inch P.Z. (D-28-11)
- Pedoli sandy loam, 8 to 15 percent slopes, high elevation (7%); Woodland site: Pinyon-Juniper-big sagebrush (D-28)

Shagnasty-Roca-Rock outcrop association (Map Symbol 412)

Shagnasty extremely stony loam, 30 to 50 percent slopes (45%); Woodland site: Pinyon-Juniper-big sagebrush (D-28)
Roca extremely stony loam, 30 to 50 percent slopes (25%); Woodland site: Pinyon-Juniper-big sagebrush (D-28)
Rock outcrop, andesite (15%)
Inclusions:
- Sevenmile silt loam, o to 4 percent slopes, moist (2%); Range site: Loamy bottom, 12 to 16-inch P.Z. (D-28)
- Lithic Argixerolls, 15 to 50 percent slopes (5%); Range site: Mountain ridge, 12 to 18-inch P.Z. (D-28)
- Aridic Argixerolls, fine, montmorillonitic, frigid, 8 to 30 percent slopes (8%); Range site: Claypan, 12 to 18-inch P.Z. (D-28)

Secret Creek-Buster-Punchbowl association (Map Symbol 420)

Secret Creek loam, 4 to 15 percent slopes (50%); Range site: Loamy, 10 to 12-inch P.Z. (D-28)
Buster gravelly loam, 4 to 15 percent slopes, moist (25%); Range site: Loamy, 10 to 12-inch P.Z. (D-28)
Punchbowl sandy loam, 8 to 30 percent slopes (15%); Range site: Shallow hill, 8 to 12-inch P.Z. (D-28-16)
Inclusions:
- Rock outcrop, andesite (2%)
- Umil loam, 2 to 15 percent slopes (4%); Range site: Shallow loamy, 8 to 12-inch P.Z. (D-28-11)
- Fishlake sandy loam, 2 to 15 percent slopes (4%); Range site: Shallow loamy, 8 to 12-inch P.Z. (D-28-11)

Labshaft-Winu association (Map Symbol 471)

Labshaft very stony loam, 15 to 50 percent slopes (50%); Range site: Mahogany savanna, 16 to 22-inch P.Z. (D-28)
Winu gravelly loam, 15 to 30 percent slopes (30%); Range site: Loamy, 16 to 22-inch P.Z. (D-28)
Inclusions:
- Mulligan loam, 8 to 30 percent slopes, north aspect (10%); Range site: Upland browse, 14 to 18-inch P.Z. (D-28)
- Argic Lithic Cryoborolls, clayey and clayey-skeletal, montmorillonitic, 8 to 30 percent slopes (7%); Range site: Claypan, 12 to 18-inch P.Z. (D-28)
- Rock outcrop, andesite (3%)

Hymas-Ansping association (Map Symbol 501)

Hymas cobbly loam, 15 to 30 percent slopes (55%); Woodland site: Pinyon-Juniper-big sagebrush (D-28)
Ansping loam, 15 to 30 percent slopes (30%); Woodland site: Pinyon-Juniper-big sagebrush (D-28)
Inclusions:
- Rock outcrop, limestone (5%)
- Cumulic Haploxerolls, loamy-skeletal, carbonatic, frigid, 2 to 8 percent slopes (5%); Range site: Loamy bottom, 5 to 12-inch P.Z. (D-28)
- Aridic Calcic Argixerolls, loamy, carbonatic, frigid, 4 to 15 percent slopes (5%); Woodland site: Pinyon-Juniper-big sagebrush (D-28)

CONVENTIONAL AND SPECIAL SYMBOLS LEGEND

Soil Survey Area: Sevenmile Wash Area
State: Nevada

Date: March 19

U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

CULTURAL FEATURES

BOUNDARIES

- National, state, or province
- County or parish
- Minor civil division
- Reservation (national forest or park, state forest or park, and large airport)
- Land grant
- Limit of soil survey (label)
- Field sheet matchline & neatline
- AD HOC BOUNDARY (label)
- Small airport, airfield, park, oilfield, cemetery, or flood pool

STATE COORDINATE TICK
1 890 000 FEET

LAND DIVISION CORNERS (sections and land grants)

ROADS

- Divided (median shown if scale permits)
- County, farm or ranch
- Trail
- ROAD EMBLEMS & DESIGNATIONS
- Interstate (66)
- Federal (287)
- State (52)
- Other (398)

RAILROAD

POWER TRANSMISSION LINE (normally not shown)

PIPE LINE (normally not shown)

FENCE (normally not shown)

LEVEES

- Without road
- With road
- With railroad

DAMS

- Large (to scale)
- Medium or small

PITS

- Gravel pit
- Mine or quarry

CULTURAL FEATURES (cont.)

MISCELLANEOUS CULTURAL FEATURES

- Farmstead, house (omit in urban areas)
- Church
- School
- Indian mound (label)
- Located object (label)
- Tank (label)
- Wells, oil or gas
- Windmill
- Kitchen midden

WATER FEATURES

DRAINAGE

- Perennial, double line
- Perennial, single line
- Intermittent
- Drainage end
- Canals or ditches
- Double-line (label) — CANAL
- Drainage and/or irrigation

LAKES, PONDS AND RESERVOIRS

- Perennial — water, w
- Intermittent — intermittent, int

MISCELLANEOUS WATER FEATURES

- Marsh or swamp
- Spring
- Well, artesian
- Well, irrigation
- Wet spot

SPECIAL SYMBOLS FOR SOIL SURVEY

SOIL DELINEATIONS AND SOIL SYMBOLS

- ESCARPMENTS — CeA, FoB2
- Bedrock (points down slope)
- Other than bedrock (points down slope)
- SHORT STEEP SLOPE
- GULLY
- DEPRESSION OR SINK
- SOIL SAMPLE SITE (normally not shown) (S)

MISCELLANEOUS

- Blowout
- Clay spot
- Gravelly spot
- Gumbo, slick or scabby spot (sodic)
- Dumps and other similar non soil areas
- Prominent hill or peak
- Rock outcrop (includes sandstone and shale)
- Saline spot
- Sandy spot
- Severely eroded spot
- Slide or slip (tips point upslope)
- Stony spot, very stony spot

RECOMMENDED AD HOC SOIL SYMBOLS

TYPIFYING PEDON DESCRIPTIONS

Ados Series

The Ados series consists of well drained soils that are moderately deep to a duripan. They formed in colluvium and alluvium of weathered limestone and dolomite. They are on uplands at elevations of 6,500 to 8,000 feet. Slopes are 4 to 15 percent. The mean annual precipitation is about 14 inches; and the mean annual temperature is about 44°F.

A typical pedon of Ados gravelly loam is located in an area of the Hopeka-Ados-Rock outcrop association at approximately 2,100 feet West and 2600 feet South of the Northeast corner of Section 32, T.18N., R.52E. This modal profile is in a nearby area of Eureka County, outside the survey boundary. There is less than 100 acres of the map unit with Ados in the survey area.

Soil Profile

A11--0 to 2 inches; pale brown (10YR 6/3) gravelly loam, dark brown 10YR 4/3) moist; weak medium platy structure parting to moderate fine granular structure; slightly hard, friable, nonsticky, nonplastic; few very fine roots; common fine and very fine vesicular pores; 15 percent gravel; slightly effervescent; moderately alkaline (pH 8.4); clear smooth boundary. (1 to 3 inches thick)

A12--2 to 4 inches; pale brown (10YR 6/3) gravelly loam, dark brown (10YR 4/3) moist; weak medium subangular blocky structure; soft, friable, nonsticky, nonplastic; common fine and very fine roots; common fine and very fine interstitial pores; 33 percent gravel; strongly effervescent; moderately alkaline (pH 8.2); gradual smooth boundary. (2 to 5 inches thick)

C1ca--4 to 18 inches; light yellowish brown (10YR 6/4) very gravelly loam, yellowish brown (10YR 5/4) moist; massive; soft, friable, nonsticky and nonplastic; few medium, common fine and very fine roots; common fine and very fine interstitial pores; 45 percent gravel; violently effervescent; moderately alkaline (pH 8.0); clear wavy boundary. (6 to 14 inches thick)

C2sica--18 to 30 inches; very pale brown (10YR 7/3) extremely gravelly loam, light yelllowish brown (10YR 6/4) moist; massive; hard lime and silica; firm, nonsticky; nonplastic; discontinuous weakly to strongly cemented portions; few moderate, common fine and very fine roots; common fine and very fine interstitial pores; 60 percent gravel; evidently effervescent; moderately alkaline (pH 8.0); abrupt wavy boundary. (10 to 13 inches thick)

C3sica--30 to 39 inches; white (10YR 8/2) strongly lime cemented extremely gravelly hardpan with thin indurated lamella, pale brown (10YR 6/3) moist; massive; extremely hard, very firm; few very fine interstitial pores; violently effervescent; moderately alkaline (pH 8.4); abrupt wavy boundary. (6 to 12 inches thick)

Range in Characteristics. These soils are usually dry; they are moist in the winter and spring months, but dry in the summer and early autumn. Mean annual soil temperature is 44° to 46°F. The control section averages 35 to 60 percent rock fragments. Depth to the petrocalcic horizon ranges from 20 to 34 inches. Depth to bedrock ranged from 30 to 40 inches.

The A1 horizon has value of 5 or 6 dry and 3 or 4 moist and chroma of 2 or 3. It is loam, gravelly loam, or very gravelly loam. Structure is platy, subangular blocky or granular. The horizon is slightly effervescent to violently effervescent.

The C1ca horizon has value of 5 or 6 dry and 3 through 5 moist, and a chroma of 3 or 4. It is gravelly loam or very gravelly loam. It is usually massive, but some profiles may have weak subangular blocky structure. It is strongly effervescent or very strongly effervescent.

The C2sica horizon has value of 6 or 7 dry and 5 or 6 moist, and chroma of 2 through 4. It is very gravelly sandy loam, extremely gravelly sandy loam, very gravelly loam, or extremely gravelly loam. Portions of this horizon have discontinuous weak, strong, or indurated cementation. It is strongly effervescent or very strongly effervescent.

Ansping Series

The Ansping series consists of deep, well drained soils that formed in alluvium from limestone. They are on strongly dissected old alluvial fans and footslopes at elevations of 6,500 to 7,500 feet. Slopes are 4 to 30 percent. The mean annual precipitation is about 11 inches and the mean annual temperature is about 44°F.

A typical pedon of the Ansping loam is located in an area of the Hymas-Ansping association at approximately 2,600 feet East and 450 feet South of the Northwest corner of Section 15, T.18N., R.52E.

The modal profile is in a nearby area of Eureka County outside the survey boundary. There is only 15 acres of the map unit containing Ansping in the survey area.

Soil Profile

A11--0 to 8 inches; grayish brown (10YR 5/2) loam, very dark grayish brown (10YR 3/2) moist; moderate fine granular structure; soft, very friable, slightly sticky, slightly plastic; many fine and very fine roots; many fine and very fine interstitial pores; 8 percent gravel; strongly effervescent; moderately alkaline (pH 8.2); abrupt smooth boundary. (5 to 8 inches thick)

A12--8 to 13 inches; brown (10YR 5/3) loam, dark brown (10Yr 3/3) moist; moderate medium subangular blocky structure; slightly hard, very friable, sticky, slightly plastic; many fine and very fine roots; common fine and very fine interstitial pores; 8 percent gravel; violently effervescent; moderately alkaline (pH 8.2); abrupt wavy boundary. (5 to 7 inches thick)

C1sica--13 to 32 inches; white (10YR 8/1) very gravelly loam, light gray (10YR 7/2) moist; massive; hard, friable, nonsticky, plastic; very few fine roots; few fine and very fine interstitial pores; 50 percent calcium coated gravel; weakly cemented with calcium and silica; violently effervescent; strongly alkaline (pH 8.6); abrupt wavy boundary. (15 to 24 inches thick)

C2ca-- 32 to 43 inches; light gray (10YR 7.2) very gravelly loam, pale brown (10YR 6/3) moist; massive; hard, firm, nonsticky, nonplastic; few fine and very fine roots; common fine interstitial pores; 40 percent calcium coated gravel; very weakly cemented with calcium and silica; violently effervescent; strongly alkaline (pH 8.6); abrupt wavy boundary. (8 to 14 inches thick)

C3sicam--43 to 55 inches; white (10YR 8/2) strongly cemented duripan, very pale brown (10YR 7/3) moist; massive; extremely hard, very firm, violently effervescent; moderately alkaline (pH 8.6)

Range in Characteristics. These soils are usually dry, they are moist in the winter and spring, but are dry in the summer and early autumn. The mean annual soil temperature is 45° to 47°F. Depth to the calcic horizon is 8 to 12 inches and

depth to weakly cemented Csica horizon is 10 to 16 inches. The mollic epipedon is 10 to 15 inches thick. The 10 to 40 inches control section averages very gravelly loam or very gravelly sandy loam with 12 to 25 percent clay and 5 to 70 percent gravel. It has 40 to 60 percent calcium carbonate equivalent.

The A horizon has value of 4 or 5 dry, chroma of 2 or 3. It has platy, granular, or subangular blocky structure.

The C horizon has value of 6 through 8 dry, and 4 through 7 moist; chroma of 2 or 3. It is massive or has subangular blocky structure. A strongly cemented duripan is commonly at depths of 40 to 55 inches but is lacking in some pedons.

Applebush Series

The Applebush series consists of deep well drained soils formed in alluvial and colluvial materials from dominantly volcanic rock sources. The soils are on alluvial fans, valley fill and the edges of drainways. Slopes are 0 to 15 percent. Mean annual precipitation is about 225mm and the mean annual temperature is about 7°C.

A typical pedon of Applebush sandy loam, 2 percent slope is located 600 feet North and 400 feet East of the Southwest corner of Section 35, T.13N., R.50E.

Soil Profile

A1--0 to 4 inches; light brownish gray (10YR 6/2) sandy loam, dark brown (10YR 3/3) moist; weak thick platy structure; slightly hard, very friable; non-sticky and slightly plastic; common very fine roots; many fine vesicular pores; about 5 percent gravel;

neutral (pH 7.2); abrupt smooth boundary. (2 to 6 inches thick)

B2--4 to 15 inches; light brownish g ray (10YR 6/2) sandy loam, dark yellowish brown (10YR 3/4) moist; moderate medium subangular blocky structure; slightly hard, very friable; slightly sticky and slightly plastic; common very fine and few fine roots; common very fine tubular pores; neutral (pH 7.2); clear wavy boundary. (6 to 12 inches thick)

B3si--15 to 24 inches; light brownish gray (10YR 6/2) sandy loam, dark yellowish brown (10YR 3/4) moist; weak medium subangular blocky structure; slightly hard, very friable; slightly sticky and slightly plastic; common very fine and fine roots; few very fine tubular pores; about 5 percent weakly cemented durinodes; neutral (pH 7.2); gradual wavy boundary. (0 to 12 inches thick)

C1si--24 to 33 inches; yellowish brown (10YR 5/4) sandy loam, dark yellowish brown (10YR 3/4) moist; weak fine and medium subangular blocky structure; slightly hard, very friable; nonsticky and nonplastic; common fine and very fine roots; few very fine tubular pores; 10 percent weekly cemented durinodes; mildly alkaline (pH 7.4); abrupt wavy boundary. (6 to 12 inches thick)

C2ca--33 to 36 inches; very pale brown (10YR 7/3) very fine sandy loam, dark yellowish brown (10YR 4/4) moist; massive; slightly hard, very friable; nonsticky and slightly plastic; common very fine and few fine roots; many fine and medium tubular pores; strongly effervescent; moderately alkaline (pH 8.2); abrupt irregular boundary. (0 to 12 inches thick)

IIC3ca--36 to 48 inches; very pale brown (10YR 7/3) very cobbly loamy sand, brown (10YR 4/3) moist; massive; loose; nonsticky and nonplastic; many very fine and fine roots; many very fine interstitial pores; 20 percent gravel and 25 percent cobbles; lime coatings on rock fragments; violently effervescent; mildly alkaline (pH 7.6); abrupt irregular boundary. (0 to 20 inches thick)

IIIC4--48 to 60 inches; pale brown (10YR 6/3) very gravelly sand, brown (10YR 4/3) moist; single grain; loose, nonsticky and non plastic; very few very fine

roots; many very fine interstitial pores; 40 percent gravel, mostly fine; midly alkaline (pH 7.4)

Range of Characteristics The thickness of the solumn ranges from 12 to 30 inches and the depth to bedrock is commonly more than 80 inches. The control section has 5 to 18 percent clay and up to 15 percent rock fragments, after mining. Reaction is neutral or mildly alkaline in the solumn and mildly to strongly alkaline in the substrata.

The soil is moist in winter and spring and dry in summer and early fall. Soil temperature ranges from 45° to 47°F.

The A1 horizon has color values of 5 or 6 dry and 3 or 4 moist with chroma of 2 or 3. Many or common vesicular pores are present decreasing with depth.

The B2 horizon has color values of 5 or 6 dry and 3 or 4 moist with chroma of 3 to 6. Textures are loam, fine sandy loam or sandy loam. Structure is weak or moderate subangular blocky or prismatic. The B2 horizon has slightly more clay than the A1 horizon, lacks free carbonates and has a few durinodes in some pedons.

The B3 horizon is commonly present. The C horizon has texture of stratified sandy loam, loamy sand or sand modified by up to 60 percent rock fragments.

Bucan Variant

Bucan soils are deep and well drained that have formed in loess high in volcanic ash over residium of weathered volcanic rock. These soils are on uplands and have slopes of 15 to

50 percent. Mean annual precipitation is about 9 inches and mean annual temperature is about 44°F.

A typical pedon of the Bucan Variant is located 1500 feet South and 500 feet East of the Northwest corner of Section 12, T.13N., R51E.

Soil Profile

A11--0 to 2 inches, light brownish gray (10YR 6/3) sandy loan, dark brown (10YR 3/3) moist; weak platy structure; slightly hard, very friable, slightly sticky and slightly plastic; common fine and medium roots, common very fine tubular and many fine interstitial pores; strongly alkaline (pH 8.8); clear wavy boundary. (2 to 6 inches thick)

A12--2 to 10 inches; grayish brown (10YR 5/2) sandy clay loam, very dark brown (10YR 4/3) moist weak fine granular structure; slightly hard very friable, sticky and plastic; common fine, medium and coarse roots; common very fine tubular and many interstitial pores; strongly alkaline (pH 8.8); abrupt smooth boundary. (2 to 8 inches thick)

B2t--10 to 21 inches; pale brown (10YR 4/3) gravelly clay loam, dark brown (10YR 4/3) moist; strong fine and medium prismatic structures; very hard, firm, very sticky and very plastic; common fine and very fine tubular pores; strongly alkaline (pH 8.8); clear wavy boundary. (10 to 15 inches thick)

B3--21 to 27 inches; yellowish brown (10YR 5/4) gravelly clay loam, dark brown (10YR 4/3) moist; moderate medium and fine angular blocky structure; very hard, firm, very sticky and very plastic; common fine and very fine tubular pores; strongly alkaline (pH 8.8); clear wavy boundary. (8 to 12 inches thick)

Range of Characteristics. These soils are usually dry; they are moist in the winter and spring, but are dry in the summer and early autumn. The mean annual soil temperature is 45 to 47°F. The solum thickness and depth to bedrock range

from 40 to 60 inches. Depth to segregated lime ranges from 15 to 30 inches. Reaction increases with increasing depth from neutral in the A horizon to moderately or strongly alkaline immediately above bedrock. Eroded phases are recognized.

The A horizon has value of 5 or 6 dry, 3 or 4 moist, and chroma of 2 or 3. It contains up to 40 percent pebbles or up to 50 percent stones. This horizon has weak or moderate, thin or medium platy, or fine or medium granular or subangular blocky structure or is massive. It is soft or slightly hard. Thickness ranges from 4 to 10 inches. When mixed to a depth of 7 inches or the thickness of the epipedon is less than 1/3 of the solum the value is 6.

The B2t horizon has value of 5 or 6 dry, 4 or 5 moist, and chroma of 2 through 4. It is clay or heavy clay loam, commonly modified by rock fragments. The B22t horizon has moderate or stony fine or medium prismatic structure.

Buster Series

The Buster series is a member of the fine-loamy, mixed, frigid family of Durixerollic Haplargids. Typically, Buster soils have brownish gray sandy loam A1 horizons, brown subangular blocky sandy clay loam B2t horizons, and white loam Csica horizons at depth of 20 inches.

A typical pedon of Buster sandy loam, 0 to 2 percent slope is located 1,400 feet West and 2,310 feet North of the Southeast corner of Section 22, T.13N., R.50E.

Soil Profile

A1--0 to 5 inches; brown (10YR 5/3) sandy loam, brown (10YR 4/3) moist; weak medium platy structure; slightly hard, friable; nonsticky, nonplastic; common fine roots; many fine vesicular and common interstitial pores; neutral (pH 7.2); clear smooth boundary. (2 to 5 inches thick)

B2t--5 to 14 inches; yellowish brown (10YR 5/4) heavy loam, dark yellowish brown (10YR 4/4) moist; moderate medium subangular blocky structure; slightly hard, friable; sticky, plastic; many fine, medium and coarse roots; common fine interstitial and few fine tubular pores; common moderately thick clay skins on the face of peds; mildly alkaline (pH 7.6); clear wavy boundary. (8 to 12 inches thick)

B3--14 to 20 inches; yellowish brown (10YR 5/4) gravelly loam, dark yellowish brown (10YR 4/4) moist; slightly sticky, slightly plastic; many fine and few medium roots; common fine interstitial and few fine tubular pores; weak medium subangular blocky structure, hard, friable; about 25 percent gravel and 5 percent cobbles; mildly alkaline (pH 7.7); abrupt smooth boundary. (8 to 12 inches thick)

Csica--20 to 60 inches; yellowish brown (10YR 6/4) weakly cemented gravelly sandy loam pan, dark yellowish brown (10YR 4/4) moist; massive; extremely hard, very firm; nonsticky, nonplastic; few, fine interstitial pores; violent effervescent; mildly alkaline (pH 8.0)

Range in Characteristics. Solum thickness and depth to the weakly cemented calcic horizon are 16 to 24 inches. The mean annual soil temperature is 44° to 47°F. Depth to lime is 5 to 18 inches. The A1 horizon has hue of 10YR or 7.5YR, value of 5 or 6 dry, and 3 or 4 moist, and chroma of 2 or 3. It has weak or moderate thick or medium platy structure. The surface 1 to 2 inches in some pedons has a fine gravelly loamy fine sand, or fine sand mulch. The remainder of the A1 horizon has

common or many very fine to medium vesicular pores. Its pH is 6.8 to 7.2. When the surface 7 inches is mixed the color value is more than 5.5 dry and 3.5 moist or the thickness having a value of 5 dry and 3 moist is less than 1/3 the thickness of the solum. The B2t horizon has hue of 10YR, value of 5 or 6 dry and 3 or 4 moist, and chroma of 3 through 5. It is loam, sandy clay loam or clay loam, averaging 25 to 35 percent clay. This horizon has weak or moderate fine to coarse subangular or angular blocky structure. Its pH is 6.8 to 8.2. The argillic horizon is 10 to 20 inches thick and includes the B3t horizon in some pedons. The Csica horizon has value of 6 through 8 dry and 4 through 7 moist, and chroma of 2 or 3. It contains 15 to 25 percent $CaCO_3$ equivalent. Random, very thin (1/64 to 1/8 inch) discontinuous, strongly silica-cemented lenses are few or common. The IIC horizon is variably stratified very gravelly sandy loam, gravelly loamy coarse sand, and gravelly sand, with thin strata of silt loam in some pedons. Its pH is 8.6 to 8.2.

Dobrow Series

The Dobrow series consists of deep, poorly drained to very poorly drained, mottled soils that formed in alluvium overlying sand and gravel. The soils are on floodplains (drainageways). Slopes are 0 to 4 percent. Mean annual precipitation is about 10 inches; average annual tempreature is 42°F.

A typical pedon of Dobrow loam, 0 to 4 percent slopes, is located 1,950 feet South and 530 feet West of the Northeast corner of Section 18, T.14N., R.5lE.

Soil Profile

A11--0 to 17 inches; grayish brown (10YR 5/2) loam, very dark grayish brown (10YR 3/2) moist; massive; very hard, friable; slightly sticky, common fine and medium roots; common simple pores; less than 5 percent gravel; neutral (pH 6.6); clear smooth boundary. (15 to 20 inches thick)

A12--17 to 34 inches; grayish brown (10YR 5/2) sandy loam, dark grayish brown (10YR 3/2) moist; massive; slightly hard, very friable; nonsticky, nonplastic; few fine roots; common interstitial and tubular pores; neutral (pH 6.7); clear smooth boundary. (15 to 20 inches thick)

C1g--34 to 40 inches; grayish brown (10YR 5/2) sandy loam, dark grayish brown (10YR 3/2) moist; common, prominent, medium, light brownish gray (10YR 6/2) mottles; massive; nonsticky and nonplastic; few fine roots; few interstitial and tubular pores; neutral (pH 6.8); gradual wavy boundary. (4 to 8 inches thick)

IIC2g--40 to 44 inches; gray (10YR 5/1) sandy clay, very dark gray (10YR 3/1) moist; common, prominent, medium, reddish brown (5YR 5/4) mottles; massive; very hard, friable; slightly sticky, slightly plastic; few fine roots; few interstitial pores; neutral (pH 6.8); abrupt smooth boundary. (2 to 6 inches thick)

IIIC3g--44 to 60 inches; olive gray (5YR 5/2) gravelly loamy sand, olive gray (5YR 4/2) moist; common, prominent, medium, reddish brown (5YR 5/4) mottles; single grained; loose, nonsticky, nonplastic; few pores; about 20 percent gravel; neutral (pH 6.8).

Range in Characteristics. The thickness of the mollic epipedon ranges from 26 to 40 inches. The mean annual soil temperature is 40°F. The profile typically is mottled. Base saturation ranges from 60 to 100. Depth to the IIC ranges from

26 to 40 inches. The texture of the control section sommonly is sandy loam with 5 to 18 percent clay, 5 to 30 percent silt and 52 to 82 percent sand. Coarse fragments range from 0 to 35 percent in the control section.

The A horizon has hue of 5YR to 7.5YR, value of 4 or 5 dry and 2 or 3 moist. Chroma is 1 or 2. It typically is not mottled, but may be in some pedons. It is slightly acid to mildly alkaline.

Typically, it does not have a B. horizon but is present in some pedons. The IIC horizon typically is mottled and gleyed. It is slightly acid to mildly alkaline.

Fishlake Series

The Fishlake series of well drained soils that are shallow to an indurated hardpan. They formed in old alluvium on terraces and alluvial fans and have 0 to 15 percent slopes. The mean annual precipitation is about 10 inches and the mean annual temperature is about 45°F.

A typical pedon of Fishlake sandy loam, 0 to 2 percent slopes, is located 1,580 feet West and 1,790 feet North of the Southeast corner of Section 4, T.12N, R.50E.

Soil Profile

A1--0 to 5 inches; light gray (10YR 7/2) sandy loan, brown (10YR 4/3) moist; weak thick platy structure; soft, very friable, nonsticky and nonplastic; few fine and medium roots; many medium vesicular pores and common medium interstitial pores; neutral (pH 7.0); clear smooth boundary. (3 to 8 inches thick)

B21t--5 to 10 inches; light yellowish brown (10YR 6/4) clay loam, yellowish brown (10YR 5/4) moist; moderate medium subangular blocky structure; slightly hard, very friable, sticky and plastic; few fine through coarse roots; few fine interstitial pores; neutral (pH 7.2); clear wavy boundary. (4 to 8 inches thick)

B22t--10 to 18 inches; light yellowish brown (10YR 6/4) loam, yellowish brown (10YR 5/4) moist; moderate medium subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; few fine through coarse roots; few fine intersitial pores; mildly alkaline (pH 7.6); abrupt smooth boundary. (3 to 10 inches thick)

Ccasim--18 to 24 inches; brownish yellow (10YR 6/6) indurated duripan, yellowish brown (10YR 5/6) moist; massive; extremely hard, brittle; strong effervescence; moderately alkaline (pH 8.0).

Range in Characteristics. The solum ranges in thickness from 10 to 20 inches. Reaction ranges from neutral to moderately alkaline, commonly increasing with depth. The soil is moist in winter and spring and dry in summer and early fall. Soil temperature ranges from 43° to 47°F.

Color values for the A horizon are 5 through 7 dry and 3 through 5 moist. Chroma ranges from 2 through 4.

Color values for the B2t horizons are 6 or 7 dry and 4 through 6 moist and chroma ranges from 3 through 5. The texture is loam or clay loam with a weighted average of 25 to 35 percent clay and less than 15 percent rock fragments. The C2 has strong to violent effervescence.

Four Star Series

The soils of the Four Star series are deep, poorly and very-poorly drained soils formed in alluvium mainly from tuffs

or ignimbrites. They are on flood plains and narrow canyon bottoms in mountainous areas. The mean annual precipitation is about 13 inches and mean annual temperature is about 43°F.

A typical pedon of Four Star sandy loam, 2 percent slope, is located 1,162 feet North and 845 feet West of the Southeast corner of Section 16, T.12N., R.51E.

Soil Profile

A11--0 to 6 inches; gray (10YR 5/1) sandy loam, very dark gray (10YR 3/1) moist; moderate medium crumb structure; soft, very friable; slightly sticky, slightly plastic; many fine and very vine roots; many very fine interstitial pores; slight effervescence; neutral (pH 7.2); clear smooth boundary. (5 to 8 inches thick)

A12--6 to 36 inches; gray (10YR 5/1) loam, black (10YR 2/1) moist; moderate medium angular blocky structure; soft, very friable; nonsticky, nonplastic; common very fine and fine roots; many very fine and few fine tubular pores; neutral (pH 7.2); gradual smooth boundary. (7 to 27 inches thick)

IIc1g--36 to 39 inches; gray (2.5Y 5/0) coarse sandy loam, gray (2.5Y 5/0) moist; common, prominent, medium, light olive brown (2.5Y 5/6) mottles; massive; soft, friable; nonsticky, nonplastic; few fine and very fine roots; common very fine tubular and many very fine intestitial pores; slightly acid (pH 6.5); gradual wavy boundary.

IIIC2g--39+ inches; light gray (2.5Y 6/0) stratified coarse sand with thin lenses of loam, dark greenish gray (5BG 4/1) moist; massive; loose, loose; slightly acid (pH 6.1).

Range in Characteristics. These soils have mean annual soil temperature ranging from 44° to 47°F., and mean summer temperature of 61° to 65°F. They are saturated for one month or more during most years unless drained. The soils are

normally very deep but may be underlain by bedrock below a depth of 48 inches when they occupy narrow mountain canyon bottoms. The control section is predominantly fine sandy loam or sandy loam, but light loam may also be included. Some stratification is not unusual and is common in narrow canyon bottoms. It includes strata as fine as clay loam or as coarse as sand or gravel.

When the control section is mixed, the clay content is less than 18 percent and rarely exceeds 15 percent gravel. These soils are usually noncalcareous throughout, but are weakly or strongly effervescent in the surface 6 to 10 inches in some pedons. Reaction is essentially constant ranging in pH from 6.2 to 7.3. In calcareous areas, pH may be as high as 8.0 in the immediate surface only. The root mat is not present in fields that have been plowed. The mollic epipedon ranges from 24 to 48 inches thick.

The A1 horizon has hue of neutral, 10YR or 2.5Y, value of 4 or 5 dry, 2 or 3 moist, and chroma of 0 through 2. It has faint to prominent high-chroma iron mottles that usually grade to faint to prominent low chroma of yellowish or bluish hued mottles in the lower part. This horizon has weak or moderate, fine to coarse subangular blocky structure or is massive. It is never both massive and hard when dry. One to several buried A1 horizons are not uncommon.

The Cg horizons have hue of neutral, 2.5Y or 5Y dry, and neutral or 2.5Y through 5Y moist, value of 5 or 6 dry, 3 through 5 moist, and chroma of 0 through 2. It usually has distinct or prominent iron or manganese mottles.

Hackwood Variant

The Hackwood soils are very deep, moderately well-drained soils that formed in alluvium and colluvium derived from volcanic rocks. These soils are on concave mountain side slopes and have slopes of 15 to 30 percent. The mean annual precipitation is about 18 inches and the mean annual air temperature is about 41°F.

A typical pedon of Hackwood Variant loam, 5 to 10 percent slopes, is located 1,480 feet South and 1,740 feet West of the Northeast corner of Section 7, T.14N., R.5lE.

Soil Profile

O1--0.2 to 0 inches; very slightly decayed leaves and fine twigs; matted, slightly acid; abrupt smooth boundary.

A11--0 to 2 inches; dark gray (10YR 4/1) loam, black (10YR 2/1) moist; weak fine granular structure; soft, friable; nonsticky, nonplastic; many fine and medium roots; many very fine and fine interstitial pores; slightly acid (pH 6.4); abrupt smooth boundary. (2 to 10 inches thick)

A12--2 to 11 inches; dark gray (10YR 4/1) very cobbly loam, black (10YR 2/1) moist; massive; soft, friable; sticky, plastic; many fine and medium roots; many very fine and fine interstitial pores; about 10 percent gravel and 30 percent cobbles; slightly acid (pH 6.4); clear wavy boundary. (10 to 15 inches thick)

A13--11 to 17 inches; brown (10YR 5/3) extremely cobbly loam, dark brown (10YR 3/3) moist; massive;

loose, friable; slightly sticky, slightly plastic; common fine and medium roots; many fine interstitial pores; about 20 percent gravel and 50 percent cobbles and stones; slightly acid (pH 6.5); clear irregular boundary. (10 to 15 inches thick)

C1--17 to 60 inches; pale brown (10YR 6/3) extremely cobbly sandy loam, dark brown (10YR 4/3) moist; massive; loose, friable; nonsticky, nonplastic; common medium roots; many fine interstitial and tubular pores; about 30 percent gravel and 50 percent cobbles and stones; neutral (pH 6.8).

Range in Characteristics. The soil is moist from late fall through the summer and dry from September through October. Additional soil moisture is supplied by lateral water movement in the lower control section or substratum. The average summer soil temperature ranges between 43° and 47°F.

The thickness of the epipedon ranges from 16 to 35 inches. Texture of the control section is typically silt loam and loam. The lower part is commonly clay loam or silty clay loam. Clay content of the control section ranges from 18 to 30 percent. Rock fragments, mainly gravels, range from 15 to 35 percent. Soil reaction is neutral to slightly acid, decreasing with depth.

The color value of the A horizon is 4 or 5 dry and 2 or 3 moist. The chroma is 1 to 3 dry and 1 or 2 moist. Structure is platy, granular or subangular blocky. Hue of the C horizon is 2.5Y or 10YR value is 6 or 7 dry and 4 or 5 moist. The chroma is 2 or 3.

Harcany Series

The Harcany series consist of deep well-drained, moderately permeable soils formed in residuum. They are commonly on north or east facing slopes of 50 to 70 percent. This series is a member of the loamy-skeletal, mixed family of Pachic Cryoborolls.

A typical pedon of Harcany loam, 30 percent slope, is located 300 feet South and 1,900 feet East of the Northwest corner of Section 5, T.14N., R.51E.

Soil Profile

A11--0 to 10 inches, grayish brown (10YR 5/2) loam, very dark brown (10YR 2/2) moist; weak medium subangular blocky; soft, very friable; nonsticky, nonplastic; many fine roots; many very fine interstitial fine pores; slightly acid (pH 6.5); clear wavy boundary. (7 to 14 inches thick)

A12--10 to 28 inches, brown (10YR 5/3) very gravelly sandy loam, dark brown (10YR 3/3) moist; massive, slightly hard, very friable; nonsticky, nonplastic, many fine and medium roots; many very fine interstitial pores; 30 percent gravel; 5 percent cobbles and 15 percent stones; mildly alkaline (pH 7.5); clean wavy boundary. (8 to 30 inches thick)

IIC1--28 to 40 inches, light brownish gray (10YR 6/2) very gravelly sandy loam, dark brown (10YR 3/4) moist; massive, hard friable; slightly sticky, slightly plastic; common fine and few medium roots; common very fine interstitial, and few very fine tubular pores; 35 percent gravel, 30 percent cobbles and 15 percent stones; moderately alkaline (pH 8.0); clear wavy boundary.

Range in Characteristics. The mean annual soil temperature is 36° to 41°F., and the mean summer soil temperature is 54° to 59°F. The mollic epipedon is 30 to 70 inches thick. The A1

horizon has value of 4 or 5 dry, 2 or 3 moist, and chroma of 2 or 3. The C horizon has dry value of 5 or 6. The 10- to 40-inch control section is principally very gravelly sandy loam but includes strata of gravelly loam and gravelly silt loam. It has 50 to 75 percent rock fragments and averages 10 to 15 percent clay.

Hopeka Series

The Hopeka series consists of well to excessively drained, moderately permeable soils formed in residuum weathered from dolomite and other limestones. The are on moderately steep to very steep mountain slopes with slope gradients from 15 to 75 percent.

A typical pedon of Hopeka cobbly loam, 25 percent slope, is located 2,800 feet South and 1,000 feet West of the Northeast corner Section 26, T.15N., R.50E.

Soil Profiles

A11--0 to 5 inches, pale brown (10YR 6/3) cobbly loam, dark brown (10YR 4/3) moist; strong thick platy structure; soft, very friable, slightly sticky, slightly plastic; few roots; many fine and very fine vesicular pores; 15 percent gravel, 10 percent cobbles; violently effervescent; strongly alkaline (pH 8.6); diffuse boundary. (3 to 7 inches thick)

A12--5 to 11 inches, pale brown (10YR 6/3) very gravelly loam, dark brown (10YR 4/3) moist; platy structure, soft very friable, slightly sticky, slighty plastic, few roots; many fine and very fine vesicular pores; 40 percent gravel, 10 percent cobbles; violently effervescent; strongly alkaline (pH 8.6); abrupt smooth boundary. (4 to 8 inches thick)

C1--11 to 20 inches, white (10YR 8/1) silt, pale brown (10YR 3/3) moist; weak fine subangular blocky struc-

ture; slightly hard, friable, slightly sticky, slightly plastic; few very fine and fine roots; vew very fine tubular and interstitial pores; violently effervescent; strongly alkaline (pH 8.6); abrupt irregular boundary. (7 to 11 inches thick).

R--20 inches hard limestone

Range in Characteristics. Depth to bedrock is 4 to 10 inches. The mean annual soil temperature is 43° to 47°F. These soils are usually dry but are moist in some part for more than 1/4 the time the soil temperature is above 41°F. They have hue of 10YR or 7.5YR, value of 5 through 7 dry, 3 or 4 moist, and chroma of 2 or 3. They are gravelly or very gravelly loam with 18 to 22 percent clay and 35 to 65 percent angular dolomite gravel. They are moderately or strongly alkaline (pH 8.4 to 8.6). They usually have violent effervescence but have strong effervescence in the surface of some pedons. The C horizon has weak blocky structure or it is massive.

Hymas Series

The Hymas series consists of shallow, well drained soils that formed in residuum weathered from limestone and calcareous shale. They are on uplands at elevations of 6,500 to 8,000 feet. Slopes are 15 to 30 percent. Mean annual precipitation is about 14 inches and mean annual temperature is about 44°F.

A typical pedon of Hymas cobbly loam is located in an area of the Hymas-Ansping association at approximately 2,200 feet East and 2,000 feet South of the Northwest corner of Section 15, T.18N., R.52E.

The Hymas modal profile is in a nearby area of Eureka County, outside the survey boundary. There is only 15 acres of the map unit containing Hymas in the survey area.

Soil Profiles

A1--0 to 3 inches; grayish brown (10YR 5/2) cobbly loam, very dark grayish brown (10YR 3/2) moist; moderate fine granular; soft, very friable, nonsticky and nonplastic; many fine and very fine roots; many fine interstitial pores; 10 percent gravel and 10 percent cobbles; slightly effervescent; moderately alkaline (pH 8.4); clear wavy boundary. (2 to 5 inches thick)

B2--3 to 9 inches; brown (10YR 5/3) very cobbly loam, dark brown (10YR 3/3) moist; moderate fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common medium and fine roots; common fine and very fine interstitial pores; 10 percent gravel and 45 percent cobbles; strongly effervescent; moderately alkaline (pH 8.4); abrupt wavy boundary. (6 to 8 inches thick)

Cca--9 to 12 inches; pale brown (10YR 6/3) extremely cobbly loam, brown (10YR 4/3) moist; massive; slightly hard, friable, slightly sticky and nonplastic; common fine roots; common fine and very fine interstitial pores; 10 percent gravel and 60 percent cobbles; strongly effervescent; moderately alkaline (pH 8.4); clear irregular boundary. (2 to 7 inches thick)

R--12 to 14 inches; limestone bedrock.

Range in Characteristics. These soils are usually dry. They are moist in the winter and spring, but are dry in the summer and early autumn. The mean annual soil temperature is 42° to 47°F. The control section contains more than 40 percent calcium carbonate equivalent, including rock fragments less than 3/4 inch in diameter. Depth to bedrock is 10 to 20 inches. The control section is dominantly medium textured and contains more than 35 percent rock fragments, chiefly angular limestone

fragments. Thickness of the mollic epipedon and solum thickness range from 7 to 14 inches. The A and B horizons have value of 4 or 5 dry and 2 or 3 moist, and chroma of 2 or 3. The C horizon has value of 5 through 8 dry and 4 through 7 moist, and chroma of 2 or 3.

Labschaft Series

The Labshaft series consists of shallow, well drained soils that formed in residuum weathered from siliceous rocks. They are on mountain slopes at elevations of 7,500 to 9,000 feet. Slopes are 15 to 50 percent. The mean annual precipitation is about 14 inches and the mean annual temperature is about 43°F.

A typical pedon of Labshaft very stony loam is located in an area of the Labshaft-Winu association at approximately 2,600 feet East and 1,000 feet North of the Southwest corner of Section 24, T.18N., R.52E.

The Labshaft modal profile is in a nearby area of Eureka County, outside the survey boundary. There is less than 50 acres of the map unit containing Labshaft in the survey area.

Soil Profile

A1--0 to 5 inches; brown (10YR 5/3) very stony loam, dark brown (10YR 3/3) moist; weak very fine granular structure; soft, very friable, slightly sticky, slightly plastic; many fine and very fine roots; many fine interstitial pores; 25 percent gravel; neutral (pH 7.0); abrupt wavy boundary. (6 to 14 inches thick)

B2--5 to 11 inches; brown (10YR 5/3) very gravelly loam, dark brown (10YR 3/3) moist; moderate fine angular blocky structure; slightly hard, friable, sticky, plastic; common fine and very fine roots; many very fine interstitial pores; 40 percent gravel, 5 percent cobbles

and 5 percent stones; neutral (pH 7.0); abrupt wavy boundary. (6 to 14 inches thick)

R--11 to 17 inches; quartzite bedrock.

Range in Characteristics. These soils are dry in the late summer and early autumn. The mean annual soil temperature is 44° to 47°F., and the mean summer soil temperature is 57° to 59°F. The solum thickness and depth to bedrock are 10 to 20 inches. The soils are neutral or slightly acid. The mollic epipedon is 6 to 14 inches thick and commonly includes part or all of the B Horizon. The A horizon has value of 4 or 5 dry, and 2 or 3 moist; chroma of 2 or 3. The B horizon has value of 5 or 6 dry, and 2 or 3 moist; chroma of 2 through 4. It is very gravelly to very stony loam, clay loam, or sandy clay loam, with 25 to 35 percent clay and 40 to 70 percent angular coarse fragments.

Locane Series

The Locane series consists of shallow, well drained slowly permeable soils on steep and very steep south-and-west-facing mountain slopes. The soils formed in weathered residuum.

A typical pedon of Locane extremely stony loam, 15 percent slope, is located 211 feet South and 158 feet West of the North-east corner of Section 34, T.14N., R.50E.

Soil Profile

A1--0 to 4 inches; light brownish gray (10YR 4/2) moist; weak medium subangular blocky structyre; soft, friable; about 10 percent gravel and 65 percent cobbles and stones; mildly alkaline (pH 7.6); clear smooth boundary.

B1--4 to 8 inches; brown (10YR 5/3) very cobbly silt loam, dark brown (10YR 4/3) moist; massive; hard, firm;

about 15 percent gravel and 25 percent cobbles; neutral (pH 7.2); clear smooth boundary.

B2t--8 to 16 inches; dark yellowish brown (10YR 4/4) very cobbly heavy clay loam, very dark grayish brown (10YR 3/2) moist; massive; very hard, very firm; few thin clay skins lining pores; about 15 percent gravel and 25 percent cobbles; neutral (pH 7.2); abrupt smooth boundary.

R--16+ inches; igneous bedrock (andesite).

Range in Characteristics. Solum thickness and depth to bedrock are 10 to 20 inches. The soils are neutral or slightly acid. The mean annual soil temperature is 44° to 47°F., and the mean summer soil temperature is 59° to 62°F. These soils are usually dry, mainly in the summer and autumn months. The A1 horizon has value of 6 or 7 dry and 3 or 4 moist, and a chroma of 2 or 3. It is gravelly to extremely stony loam or clay loam with slightly hard to hard consistence. It has a granular or platy structure. It has class 2 or 3 stoniness. The B2t horizon has hue of 10YR or 7.5YR, value of 4 or 5 dry and 3 or 4 moist, and chroma of 2 through 4. It has weak or moderate blocky or subangular blocky structure, or is massive. The argillic horizon is 7 to 15 inches thick. It contains 35 to 40 percent clay.

Moonshine Series

The Moonshine series consists of shallow, well drained, slowly to very slowly permeable soils on old slightly to highly dissected fans. They formed in calcareous alluvium. Slopes range from 2 to 15 percent.

A typical pedon of Moonshine gravelly fine sandy loam, 7 percent slope, is located 2,430 feet East and 420 feet North of the Southwest corner of Section 18, T.13N, R.51E.

Soil Profile

A1--0 to 2 inches; grayish brown (10YR 5/2) gravelly fine sandy loam, very dark grayish brown (10YR 3/2) moist; weak very fine and fine subangular blocky structure; soft, very friable, slightly sticky, slightly plastic; many fine roots; common fine interstitial pores; about 15 percent gravel; mildly alkaline (pH 7.4); abrupt wavy boundary. (1 to 3 inches thick)

B21t--2 to 5 inches; dark brown (10YR 4/3) heavy clay loam, dark brown (7.5YR 4/4) moist; moderate medium subangular blocky structure; hard, firm; common moderately thick clay skins occuring on the face of peds; very sticky, very plastic; many fine common medium roots; many interstitial and tubular pores; less than 5 percent gravel; mildly alkaline (pH 7.5); clear smooth boundary.

B22t--5 to 11 inches; light brown (7.5YR 6/4) heavy clay loam, dark brown (7.5YR 4/4) moist; weak medium subangular blocky structure; very hard, firm, few thin clay skins occuring on the face of peds; sticky and plastic; few fine roots; few tubular pores; mildly alkaline (pH 7.6); clear smooth boundary.

Ccasi--11 to 16 inches; white (10YR 8/2) weakly cemented sandy clay loam pan, yellow (10YR 7/6) moist; massive; extremely hard, extremely firm; violent effervescence; moderately alkaline (pH 8.2); abrupt smooth boundary.

Ccasim--16+ inches; white (10YR 8/2) indurated duripan, yellow (10YR 7/6) moist; massive; extremely hard, brittle, violent effervescence; moderately alkaline (pH 8.4).

Range in Characteristics. Thickness of the solum ranges from 10 to 19 inches. Depth to calcareous material ranges from 10 to 19 inches. Depth to indurated duripan ranges from 10 to 20 inches. Coarse fragments are less than 15 percent in the

control section. Mean annual soil temperature is less than 47°F. The argillic horizon averages 35 to 50 percent clay and has an increase of 15 percent clay within a vertical distance of 1-inch in uncultivated areas and 3 inches in cultivated areas at the upper boundary of the argillic horizon.

The A horizon has a hue of 7.5YR or 10YR, value of 4 or 5 dry, 3 or 4 moist, and chroma of 2 through 4. It is slightly acid to mildly alkaline.

The B2t horizon has a hue of 7.5YR or 10YR, value of 4 through 6 dry, 3 through 5 moist and chroma of 2 through 4. It is neutral or mildly alkaline.

The Cca horizon has a hue of 7.5YR or 10YR. It is mildly alkaline to moderately alkaline.

Mulligan Series

The Mulligan series consists of deep well drained soils formed in colluvium weathered dominantly from igneous rocks Mulligan are in horizontally concave areas of mountain side-slopes. Slopes are 4 to 50 percent. Mean annual precipitation is about 18 inches and mean annual temperature is about 43°F.

A typical pedon of Mulligan loam, 25 percent slope, is located 1,480 feet North and 900 feet West of the Southeast corner of Section 6, T.14N, R.81E.

Soil Profiles

A11--0 to 8 inches, dark grayish brown (10YR 4/2) loam, very dark brown (10YR 2/2) moist; moderate medium and fine subangular blocky structure; slightly hard, friable, nonsticky, slightly plastic; many fine roots;

common fine tubular pores; about 8 percent gravel; neutral (pH 6.8); clear wavy boundary. (3 to 12 inches thick)

A12--8 to 23 inches, grayish brown (10YR 5/2) very cobbly loam, very dark grayish brown (10YR 3/2) moist; weak fine granular structure; soft, very friable, nonsticky, slighty plastic, common fine and medium roots; common fine tubular pores; about 10 percent gravel, 30 percent cobbles, and 10 percent stones; neutral (pH 6.8); clear wavy boundary. (10 to 20 inches thick)

B2t--23 to 60 inches; pale brown (10YR 6/3) very cobbly sandy clay loam, brown (10YR 4/3) moist; massive; hard, firm, sticky and plastic; common fine and medium roots, decreasing with depth; few fine tubular pores; 5 percent gravel, 25 percent cobbles, 10 percent stones, common, thin clay films on peds and bridging mineral grains; neutral (pH 7.0).

Range of Characteristics. The thickness of the solum ranges from 35 to 60 inches and the depth to bedrock ranges from 40 to over 60 inches. The mollic epipedon ranges from 20 to 36 inches thick and includes an upper argillic horizon in some pedons. The control section contained 25 to 35 percent clay and 35 to 60 percent rock fragments, mostly cobbles and stones.

The soil is moist in winter and spring and dry in summer and fall.

The mean annual temperature is 44° to 47°F. and the mean summer temperature is 55° to 59°F.

The A horizon has a color value of 4 or 5 dry and 2 or 3 moist. The chroma is 2 or 3.

The B2t horizon has a color value of 5 or 6 dry and 2 through 4 moist. The chroma ranges from 2 through 4. The texture may be sandy clay loam, heavy loam or clay loam with 35

to 60 percent rock fragments in the upper 20 inches commonly increasing with depth.

The C horizon is present in some pedons.

Muni Series

The Muni series consists of well drained soils that are shallow to a strongly silica-cemented hardpan. The soils formed in mixed alluvium from mainly volcanic rocks, on fan terraces. Slopes are 0 to 15 percent. Mean annual precipitation is about 10 inches and mean annual temperature is about 45°F.

A typical pedon of Muni sandy loam, 5 percent slope, is located 2,110 feet East and 210 feet North of the Southwest corner of Section 15, T.13N., R.47E.

Soil Profile. Surface has about 30 percent cover of subrounded gravel.

A1--0 to 2 inches; brown (10YR 5/3) sandy loam, dark brown (10YR 3/3) moist; weak medium platy structure; soft, very friable; nonsticky and nonplastic; few very fine roots; many fine and medium vesicular pores; about 3 percent gravel; moderately alkaline (pH 8.0); clear smooth boundary. (1 to 5 inches thick)

B1t--2 to 6 inches; brown (10YR 5/3) sandy loam, dark brown (10YR 4/3) moist; weak medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; many very fine and fine roots; many very fine tubular pores; about 3 percent gravel; moderately alkaline (pH 8.0); clear smooth boundary. (1 to 4 inches thick)

B12t--6 to 12 inches; yellowish brown (10YR 5/6) sandy clay loam, dark yellowish brown (10YR 4/4) moist; moderate medium subangular blocky structure; slightly hard, friable, sticky and plastic; few very fine and fine roots; about 3 percent gravel; moderately alkaline (pH 8.2); clear smooth boundary. (5 to 12 inches thick)

IIC1casim--12 to 34 inches; very pale brown (10YR 7/3) strongly cemented duripan, light yellowish brown (10YR 6/4) moist; massive; extremely hard, extremely firm; partial laminar cap; discontinuous indurated plates; few fine roots between plates; about 25 percent gravel; violent effervescence; moderately alkaline (pH 8.4); clear smooth boundary. (18 to 36 inches thick)

IIC2casi--34 to 58 inches; very pale brown (10YR 7/4) sand, light yellowish brown (10YR 6/4) moist; single grain; loose, nonsticky and nonplastic; few fine and very fine roots; about 20 percent of volume partly calcium cemented; about 5 percent gravel; violent effervescence; strongly alkaline (pH 8.6); clear smooth boundary. (0 to 24 inches thick)

IVC3--58 to 60 inches; brownish yellow (10YR 6/6) gravelly sand, yellowish brown (10YR 5/4) moist; single grain; loose, very friable; nonsticky and nonplastic; about 25 percent gravel; moderately alkaline (pH 8.4).

Range in Characteristics. The thickness of the solum and the depth to a duripan ranges from 10 to 20 inches. The control section contains 18 to 35 percent clay and up to 20 percent rock fragments.

The soil is moist in winter and spring and dry in summer and fall. Soil temperature ranges from 44° to 47°F.

The A1 horizon has a color value of 5 or 6 dry and 3 or 4 moist. The chroma is 2 or 3.

The B2t horizon has a color value of 5, 6 or 7 dry and 4 or 5 moist. The chroma is 3 or 4.

The Csican horizon has slight to violent effervescence. Cementation is continuous as in strongly cemented plates alternating with weakly cemented or uncemented layer. The Csica horizon has weak cementation in whole or in irregular separated areas.

Ney Series

The Ney series consists of well drained soils that are shallow to hard bedrock. They formed in residuum of weathered andesite on mountain ridges and sideslopes. Slopes are 8 to 50 percent. Mean annual precipitation is about 16 inches and the mean annual air temperature is about 44°F.

A typical pedon of Ney gravelly loam, 45 percent slope, 1,320 feet East and 1,900 feet South of the Northwest corner of Section 21, T.15N., R.51E.

Soil Profile. Surface has about 5 percent stones, 5 percent cobbles and 10 percent gravel.

A1--0 to 6 inches; dark grayish brown (10YR 4/2) gravelly loam, very dark brown (10YR 2/2) moist; moderate fine granular structure; soft, very friable, slightly sticky and slightly plastic; many fine through medium roots; common fine tubular pores; 20 percent gravel; mildly alkaline (pH 7.4); abrupt smooth boundary. (2 to 5 inches thick)

B2t--6 to 9 inches; grayish brown (10YR 5/2) gravelly loam, very dark grayish brown (10YR 3/2) moist; moderate fine subangular blocky structure; slightly hard, friable, sticky and plastic; many fine through medium roots, few coarse roots; few fine tubular pores; few thin clay skins on peds; about 30 percent gravel; neutral (pH 7.2); clear smooth boundary. (3 to 6 inches thick)

B3--9 to 12 inches; brown (10YR 5/3) sandy loam, dark brown (10YR 3/3) moist; moderate fine subangular blocky structure; soft, very friable, nonsticky and slightly plastic; about 10 percent gravel; neutral (pH 7.2); abrupt irregular boundary. (0 to 6 inches thick)

R--12 inches; slightly fractured igneous bedrock (andesite).

Range in Characteristics. The thickness of the solum and depth to bedrock ranges from 10 to 20 inches. The thickness of the mollic epipedon ranges from 7 to 16 inches and commonly includes part or all of the B2t horizon.

The control section contains 18 to 25 percent clay and 5 to 35 percent rock fragments. Soil reaction ranges from neutral to mildly alkaline.

The soil is moist in winter and spring and dry in summer and early fall. Soil temperature ranges from 43° to 46°F.

The color value of the A horizon is 4 or 5 dry and 2 or 3 moist. The chroma is 2 or 3. The B2t horizon has a color value of 4, 5 or 6 dry and 2 or 3 moist. The chroma is 2 or 3.

The texture is loam, sandy loam, or sandy clay loam. The clay content ranges from 18 to 23 percent and the rock fragment content 5 to 35 percent.

Packham Variant

The Packham Variant consists of moderately deep to limestone, somewhat excessively drained, moderately to rapidly permeable soils that formed in residuum and colluvium. The soils are on mountain footslopes and backslopes. Slopes are 15 to 50 percent. Mean annual precipitation is 14 inches.

A typical pedon of Packham Variant very gravelly loam 45 percent slope is located 2,320 feet South and 1,210 feet West of the Northeast corner of Section 23, T.15N., R.50E.

Soil Profile

A1--0 to 3 inches; pale brown (10YR 6/3) very gravelly loam, dark grayish brown (10YR 4/2) moist; weak fine crumb structure soft, friable; slightly sticky, slightly plastic; many very fine and fine roots; many interstitial pores; about 25 percent gravel and 15 percent cobbles and stones; violent effervescence; moderately alkaline (pH 8.1); clear smooth boundary.

B2--3 to 14 inches; light yellowish brown (10YR 6/4) very gravelly loam, dark brown (10YR 4/3) moist; weak fine crumb structure; soft, friable; slightly sticky, slightly plastic; common fine, medium and coarse roots; main interstital pores; about 35 percent gravel and 5 percent cobbles; violent effervescence; moderately alkaline (pH 8.3); clear smooth boundary.

C1--14 to 29 inches; very pale brown (10YR 7/3) very gravelly loamy coarse sand, dark yellowish brown (10YR 4/4) moist massive; slightly hard, friable; nonsticky, nonplastic; common roots to 21 inches; common pores; gravel coated with lime; about 35 percent gravel and 5 percent cobbles; violent effervescence; moderately alkaline (pH 8.4); abrupt smooth boundary.

R--29+ inches; limestone bedrock

Range in Characteristics. Thickness of the solum ranges from 10 to 20 inches. Depth to limestone bedrock ranges from 10 to 20 inches. Depth to calcareous material ranges from 0 to 5 inches. Coarse fragments range from 35 to 55 percent in the control section. The control section typically averages a very gravelly sandy loam but textures range from 10 to 30 percent clay, 15 to 70 percent sand and 0 to 75 percent silt. Mean annual soil temperature is 47°F.

The A horizon has a hue of 7.5YR to 2.5Y, value of 4 through 7 dry, 3 through 5 moist, and chroma of 2 through 4. It is mildly alkaline or moderately alkaline. Coarse fragments range

from 20 to 45 percent. Typically it has granular or crumb structure but may be platy. Typically it is a very gravelly loam, but varies in some pedons.

The B horizon has a hue of 7.5YR to 2.5Y, value of 5 through 7 dry, 3 or 4 moist and chroma of 2 through 4. It is mildly alkaline or moderately alkaline. Coarse fragments range from 35 to 55 percent.

The C horizon has a hue of 7.5YR to 2.5Y, value of 6 through 8 dry, 4 through 6 moist and chroma of 2 through 4. It is mildly alkaline to strongly alkaline. Coarse fragments range from 35 to 55 percent.

Pedoli Series

The Pedoli series consists of well drained, moderately permeable soils formed in mixed gravelly alluvium. They are on gently sloping alluvial fans and lake terraces with slope gradients of from 2 to 4 percent.

A typical pedon of Pedoli sandy loam, 3 percent slope, is located 1,690 feet East and 1,900 feet North of the Southwest corner of Section 29, T.13N., R.50E.

Soil Profile

A1--0 to 4 inches; yellowish brown (10YR 5/4) sandy loam, dark yellowish brown (10YR 3/4) moist; moderate medium prismatic structure parting to moderate very coarse platy; soft, very friable; nonsticky, nonplastic; few fine roots; many fine and very fine vesicular pores; moderately alkaline (pH 8.0); clear smooth boundary. (3 to 6 inches thick)

B2t--4 to 16 inches; pale brown (10YR 6/3) clay loam, yellowish brown (10YR 5/4) moist; moderate medium and

coarse subangular blocky structure parting to strong very fine subangular blocky; hard, firm; few thick clay skins on the face of peds; sticky, plastic; common fine few medium roots; common very fine and fine interstitial and few fine tubular pores; slight effervescence; moderately alkaline (pH 8.0) gradual smooth boundary. (6 to 14 inches thick)

B3--16 to 25 inches; pale brown (10YR 6/3) loam, yellowish brown (10YR 5/4) moist; massive; slightly hard, friable; slightly sticky, slightly plastic; common fine roots; few interstitial pores; strong effervescence; moderately alkaline (pH 8.0); clear smooth boundary. (7 to 11 inches thick)

C1sica--25 to 46 inches; very pale brown (10YR 7/4) fine sandy loam, brown (10YR 5/3) moist; massive; slightly hard, very friable; nonsticky, nonplastic; few fine roots; many fine interstitial pores; about 18 percent durinodes; violent effervescence; moderately alkaline (pH 8.0); clear wavy boundary. (18 to 24 inches thick)

C2ca--46 to 60 inches; pale brown (10YR 6/3) loamy fine sand, yellowish brown (10YR 5/4) moist; massive; soft, very friable; violently effervescent; moderately alkaline (pH 8.0).

Range in Characteristics. Solum thickness is 16 to 30 inches. The mean annual soil temperature is 44° to 47°F., and the mean summer soil temperature is 61° to 63°F. The pebbles are rounded and subrounded and are dominantly limestone. The A1 horizon has value of 5 or 6 dry and 3 or 4 moist, and chroma of 2 or 3. The surface 7 inches has an average value of more than 5 dry and 3 moist. This horizon is 4 to 8 inches thick.

The B2t horizon has value of 6 or 7 dry and 4 or 5 moist, and chroma of 3 or 4. It is gravelly loam or gravelly clay loam with 25 to 35 percent clay and 10 to 25 percent gravel. This horizon has angular or subangular blocky structure, and is slightly hard or hard.

The Csica horizon has value of 6 through 8 dry and 5 through 7 moist and chroma of 3 or 4. It is gravelly or very gravelly, sandy loam to loamy sand, and is soft to hard. A few lime concretions are in some pedons. The pebbles are coated with lime-silica on the underside and/or some (less than 20%) durinodes are in some pedons. The Csica horizon is moderately or strongly alkaline and violently or strongly effervescent.

Pernty Series

The Pernty series consists of shallow well drained moderately slowly permeable soils formed in residuum weathered from Andesite and colluvium. They are on steep and very steep mountain slopes with gradients of from 20 to 70 percent.

A typical pedon of Pernty extremely stony loam, 20 to 30 percent slope, is located 1,370 feet North and 2,320 feet East of the Southwest corner of Section 36, T.14N., R.50E.

Soil Profile

A1--0 to 3 inches; grayish brown (10YR 5/2) extremely stony loam, very dark grayish brown (10YR 3/2) moist; moderate fine and medium granular structure; soft, friable, slightly sticky, slightly plastic; very few fine and fine roots; many very fine interstitial pores; about 30 percent gravel and 45 percent cobbles and stones; neutral (pH 7.2); clear wavy boundary. (2 to 4 inches thick)

B21t-- 3 to 9 inches; brown (10YR 5/3) very stony clay loam, dark brown (10YR 3/3) moist; moderate medium subangular blocky structure; hard, firm; very sticky, very plastic; common very fine and medium roots; few fine intestitial and many tubular pores; few thin clay skins occuring on the face of peds; about 10 percent gravel, 30 percent stones; neutral (pH 7.0; abrupt wavy boundary. (4 to 8 inches thick)

B22t--9 to 10 inches; brown (10YR 5/3) very stony clay loam, dark brown (10YR 3/3) moist; moderate medium subangular blocky structure; very hard, very firm; very sticky, very plastic; common very fine and medium roots; common very fine tubular pores; few moderately thin clay skins occuring on the face of peds; about 25 percent gravel, 30 percent stones; neutral (pH 6.8); abrupt irregular boundary. (1 to 6 inches thick)

R--10+ inches, igneous bedrock (andesite)

Range in Characteristics. The thickness of the solum and depth to the lithic contact are 14 to 20 inches. The mollic epipedon is 7 to 10 inches thick. The mean annual soil temperature is 42° to 47°F., and the mean summer soil temperature is 59° to 64°F. These soils have an aridic moisture regime that borders on xeric.

The A1 horizon has chroma of 2 or 3.

The B2t horizon has value of 3 or 4 moist. It is dominantly clay loam but is loam in some pedons. It has 25 to 35 percent clay and averages 35 to 50 percent rock fragments.

Punchbowl Series

The Punchbowl series consists of well drained soils formed in residuum of weathered andesite. They are shallow to hard bedrock on hill tops and side slopes of hills and mountains. Slopes are 4 to 50 percent. Mean annual precipitation is about 10 inches and mean annual temperature is about 45°F.

A typical pedon of Punchbowl sandy loam, 8 percent slope, is located 1,580 feet West and 2,480 feet North of the Southeast corner of Section 9, T.12N., R.50E.

Soil Profile. Surface has about 50 percent gravel, 10 percent cobbles.

A1--0 to 3 inches; brown (10YR 5/3) sandy loam, dark brown (10YR 4/3) moist; weak fine granular structure; soft, very friable, nonsticky and nonplastic; few very fine and fine roots; few very fine tubular and interstitial pores; 5 percent gravel; mildly alkaline (pH 7.4); clear smooth boundary. (2 to 5 inches thick)

B1--3 to 7 inches; pale brown (10YR 6/3) sandy clay loam, brown (10YR 4/3) moist; modeate medium subangular blocky structure; hard, firm; sticky and slightly plastic; common very fine and fine roots; common very fine tubular pores; 10 percent gravel; slightly effervescent; moderately alkaline (pH 8.2); clear smooth boundary. (0 to 4 inches thick)

B2t--7 to 11 inches; yellowish brown (10YR 5/4) gravelly clay loam, strong brown (7.5YR 4/6) moist; massive; very hard, firm; sticky and plastic; common very fine and fine roots; common very fine and fine tubular pores; few thin and moderately thick patchy colloid coats on rock fragments; 20 percent gravel; violent effervescence; moderately alkaline (pH 8.2); abrupt smooth boundary. (4 to 10 inches thick)

R--11+ inches; hard tuffaceous bedrock

Range in Characteristics. The thickness of the solum and the depth to bedrock ranges from 8 to 14 inches. The control section contains 18 to 35 percent clay and 10 to 35 percent rock fragments. Soil reaction ranges from material to moderately alkaline.

The soil is moist in winter and spring; partially moist 10 to 20 days in summer and dry the remainder of the year. Soil temperature ranges from 45° to 47°F.

The color value of the A horizon is 4, 5 or 6 dry and 4 or 5 moist. The chroma is 3 or 4. The B2 horizon has color value of

6 or 7 dry and 4 or 5 moist. Th chroma is 3 or 4. The texture of this horizon is heavy loam, sandy clay loam or clay loam. Clay content ranges from 25 to 35 percent and rock fragment content (mostly gravel) from 5 to 35 percent. Effervescence ranged from none to strong. Some pedons have few soft line segregations in lower part.

Roca Series

The Roca series consists of deep, well drained soils that formed in residuum weathered from quartzite, andesite, and rhyolite. They are on uplands at elevations of 6,000 to 7,500 feet. Slopes are 15 to 30 percent. Mean annual precipitation is about 12 inches and mean annual temperature is about 44° F.

A typical pedon of Roca extremely stony loam is located at approximately 1,500 feet North and 2,000 feet East of the Southwest corner of Section 23, T.18N., R.52E. The Roca modal profile is in a nearby area of Eureka County, outside the survey boundary. There is only 15 acres of the map unit containing Roca in the survey area.

Soil Profile. The surface contains 15 to 40 percent stones.

A11--0 to 4 inches; grayish brown (10YR 5/2) extremely stony loam, very dark grayish brown (10YR 3/2) moist; moderate coarse platy structure; slightly hard, friable, slightly sticky, slightly plastic, common fine and very fine roots; few medium, and common fine vesicular pores; 10 percent gravel, 5 percent cobbles; neutral (pH 7.0); clear smooth boundary. (3 to 4 inches thick).

A12--4 to 8 inches; brown (10 5/3) cobbly loam, dark brown (10YR 3/3) moist; weak medium play parting to moderate medium subangular blocky structure; soft, friable, slightly sticky, slightly plastic; common

medium, fine, and very fine roots; many fine and very fine interstitial and common fine and very fine tubular pores; 10 percent gravel and 5 percent cobbles; neutral (pH 7.0); clear wavy boundary. (3 to 5 inches thick)

B1t--8 to 13 inches; yellowish brown (10YR 5/4) very gravelly clay loam, dark yellowish brown (10YR 3/4) moist; strong fine angular blocky structure; hard, firm, sticky, plastic; many fine and very fine roots; common fine tubular pores; common thin pressure faced on peds; 35 percent gravel; neutral (pH 7.0); clear wavy boundary. (3 to 7 inches thick)

B2t--13 to 29 inches; yellowish brown (10YR 5/4) very gravelly clay, dark yellowish brown (10YR 3/4) moist; weak medium prismatic structure parting to strong medium angular blocky structre; very hard, very firm, very sticky, very plastic; common fine tubular pores; many thick pressure faces on peds; 35 percent gravel and 5 percent cobble; neutral (pH 7.0); clear irregular boundary. (10 to 18 inches thick)

B3t--29 to 35 inches; pink (7.5YR 7/4) very gravelly clay loam, brown (10YR 5/4) moist; strong medium angular blocky structure; very hard, very firm, very sticky, very plastic; common fine tubular pores; common thin clay films in pores and on ped faces; 35 percent gravel and 5 percent cobbles; slightly effervescent; mildly alkaline (pH 7.6); clear irregular boundary. (6 to 10 inches thick)

R--35 to 42 inches; quartzite bedrock.

Range in Characteristics. These soils are usually dry; they are moist in the winter and spring months, but are dry in the summer and early autumn. The mean annual soil temperature is 44° to 46°F. The solum is 25 to 44 inches thick. Depth to bedrock is 20 to 40 inches. When mixed, the control section averages 35 to 45 percent clay modified by 35 to 50 percent gravel and cobbles. The soil is slightly acid or neutral.

The A1 horizon has value of 5 or 6 dry, and 3 or 4 moist; chroma of 2 or 3. It has platy, subangular blocky, or granular structure.

The B horizon has hue of 7.5YR and 10YR: value of 5 through 7 dry, and 3 through 5 moist; averages 35 to 45 percent clay modified by 35 to 50 percent coarse fragments. It is prismatic or angular blocky.

Secret Creek Series

The Secret Creek Series consists of deep well drained soils with moderately rapid permeability. They are on smooth to convex, gentle to strongly sloping alluvial fans with slope gradients of 2 to 15 percent.

A typical pedon of Secret Creek fine sandy loam, 4 percent slope is located 200 feet North and 9,150 feet East of the Southwest corner of Section 14, T.14N., R.50E.

Soil Profile

A1--0 to 11 inches grayish brown (10YR 5/2) fine sandy loam, very dark grayish brown (10YR 3/2) moist; moderate fine subangular block; soft, very friable, nonsticky, nonplastic, common medium roots, few fine tubular pores; neutral (pH 7.0); gradual smooth boundary. (8 to 14 inches thick)

B21--11 to 20 inches, grayish brown (10YR 5/2) loam, dark brown (10YR 3/3) moist; moderate, medium subangular blocky; soft friable, nonsticky, nonplastic, common, medium roots; few fine tubular pores; neutral (pH 7.0); gradual wavy boundary. (7 to 11 inches thick)

B22--20 to 33 inches, grayish brown (10YR 5/2) loam, dark brown (10YR 3/3) moist, moderate medium subangular blocky; soft, friable; nonsticky, nonplastic; few very fine and medium roots; very vew fine and fine tubular

pores; neutral (pH 7.2) clear wavy boundary. (10 to 15 inches thick)

C--33 to 60 inches, pale brown (10YR 6/3) fine sandy loam, dark brown (10YR 4/3) moist; massive, soft, very friable; nonsticky, nonplastic; common fine and very fine roots; common very fine and fine tubular pores; mildly alkaline (pH 7.4)

Range in Characteristics. Thickness of solum ranges from 16 to 35 inches. Mean annual soil temperatures ranges from 45° to 47°F., and mean summer soil temperature from 63° to 65°F. These soils are noncalcareous and range in pH from 6.2 to 7.4. These values either remain constant or increase slighlty with depth. Colors of the Al horizons include hues of 10YR, values of 4 of 5 dry and 2 or 3 moist, and chromas of 2 or 1. Chromas of 1, however, do not occur with moist values of 2, and only occur in the All horizons. Structure of the Al horizons ranges from weak, fine or medium subangular blocky or granular, or is massive. Consistence ranges from soft or loose. Colors of th B2 horizons include hues of 10YR, values of 5 dry and 3 or 4 moist, and chromas of 2 or 3. Texture is sandy loam, fine sandy loam, or coarse sandy loam. Colors of the C horizons include hues of 10YR, values of 5 dry and 3 or 4 moist, and chromas of 3 or 2.

Segura Series

The Segura series consists of well-drained soils that are shallow to hard bedrock. They formed in residuum of weathered rhyolite on mountain sideslopes of 8 to 50 percent. Mean annual precipitation is about 14 inches and the mean annual temperature is about 45°F.

Soil Profile. Surface has about 30 percent stones, 20 percent cobbles, and 10 percent gravel.

A1--0 to 3 inches; brown (10YR 5/3) sandy loam, dark brown (10YR 3/3) moist; moderate medium granular structure; loose, very friable, nonsticky and nonplastic; common fine and very fine roots; common very fine tubular and interstital pores; 5 percent gravel, 2 percent cobbles, moderately alkaline (pH 8.0); clear smooth boundary. (2 to 6 inches thick)

B2t--3 to 7 inches; brown (10YR 5/3) sandy clay loam, dark brown (10YR 3/3) moist; moderate medium subangular blocky structure; slightly hard, firm, slightly sticky, plastic; common very fine through medium roots; common fine and very fine tubular pores; about 10 percent gravel; moderately alkaline (pH 8.0); clear smooth boundary. (4 to 12 inches thick)

C1--7 to 10 inches; yellowish brown (10YR 5/4) gravely sandy loam, dark yellowish brown (10YR 4/4) moist; strong medium subangular blocky structure; slightly hard, firm, slightly sticky and slightly plastic; common very fine through medium roots; common very fine and fine tubular pores; about 30 percent gravel; moderately alkaline (pH 8.0); abrupt wavy boundary. (0 to 6 inches thick).

R--10 inches; hard rhyolitic bedrock with fine cracks 6 to 12 inches apart.

Range in Characteristics. The thickness of the solum ranges from 7 to 20 inches. The mollic epipedon range from 6 to 16 inches thick. It commonly includes part or all of the Bt horizon. Thin epipedons are mollic after mixing to 7 inches. Soil reaction ranges from neutral to moderately alkaline. The control section contains 18 to 25 percent clay and 10 to 35 percent rock fragments.

The soil is moist in winter and spring and clay in summer in early fall. Soil temperature ranges from 43° to 47°F.

The A horizon has a color value of 4 or 5 dry and 2 or 3 moist. The chroma is 2 or 3. The color value of the B2 horizon is 4, 5 or 6 dry and 2 or 3 moist. The chroma is 2, 3 or 4 and the texture is loam or sandy clay loam.

Sevenmile Series

The Sevenmile series consists of very deep, well drained soils formed in mixed alluvium from mainly igneous rocks. They are on floodplains and have 0 to 4 percent slopes. The mean annual precipitation is about 9 inches, and the mean annual temperature is about 45°F.

A typical pedon of Sevenmile silt loam, 3 percent slope, is located 840 feet West and 1,480 feet North of the Southeast corner of Section 34, T.13N., R.50E.

Soil Profile

A1--0 to 4 inches; grayish brown (10YR 5/2) silt loam, dark brown (10YR 3/3) moist; weak coarse platy structure; slightly hard, very friable; nonsticky and nonplastic; few fine and very fine roots; common fine vesicular pores; mildly alkaline (pH 7.4); clear smooth boundary. (3 to 6 inches thick)

B2--4 to 11 inches; brown (10YR 5/3) silt loam, very dark grayish brown (10YR 3/2) moist; moderate coarse prismatic structure parting to moderate medium subangular blocky; slightly hard, very friable; nonsticky and slightly plastic; few medium common fine and very fine roots; few fine tubular pores; mildly alkaline (pH 7.4); clear smooth boundary. (5 to 12 inches thick)

C1--11 to 20 inches; brown (10YR 5/3) silt loam, very dark grayish brown (10YR 3/2) moist; weak medium and coarse subangular blocky structure; slightly hard, very friable; slightly sticky and slightly plastic; few medium common fine and very fine roots; few fine

tubular pores; moderately alkaline (pH 8.0); gradual smooth boundary. (8 to 20 inches thick)

C2--20 to 36 inches; brown (10YR 5/3) stratified fine sandy loam with thin lenses of sandy loam and silt loam, dark brown (10YR 4/3) moist; massive; slightly hard, very friable; nonsticky and nonplastic; common fine roots; few very fine and fine tubular pores; moderately alkaline (pH 8.0); clear wavy boundary. (10 to 20 inches thick)

C3--36 to 60 inches; yellowish brown (10YR 5/4) silt loam, dark brown (10YR 3/3) moist; massive; soft very friable, nonsticky and nonplastic; few fine and very fine roots; few very fine tubular pores; mildly alkaline (pH 7.8).

Range of Characteristics. A mollic epipedon ranges from 10 to 20 inches thick. It commonly includes B and upper C horizons. Organic matter decreases irregularly with depth. The control section is comprised of stratified materials averaging 8 to 18 percent clay, more than 15 percent fine through coarse sand and less than 15 percent gravel. Soil reaction is neutral through moderately alkaline.

The soil is moist in winter and dry in summer and fall. Soil temperature ranges from 45° to 47°F.

The color value of the A horizon is 4 or 5 dry, crushed and 2 or 3 moist. The chroma is 2 or 3 and pores are commonly vesicular. The color value of the B horizon is 4 or 5 dry and 2 or 3 moist. The chroma is 2 or 3 and the structure is prismatic or subangular blocky. The C1 horizon has a color value of 4 through 7 dry and 3 through 5 moist. The chroma is 2 or 3. The C2 and C3 horizons have a color value of 5 through 7 dry and 3 through 5 moist. They have a chroma of 2 through 4.

These two horizons are comprised of strata of silt loam, loam, very fine sandy loam, and sandy loam; minor lenses of coarse or finer textures or gravelly material.

Shagnasty Series

The Shagnasty series consists of very deep and deep, well drained soils formed in residuum and colluvium weathered from rhyolite, andesite, and quartzite. They are on uplands at elevations of 6000 to 8000 feet. Slopes of 15 to 50 percent. The mean annual precipitation is about 14 inches and the mean annual temperature is about 44°F.

A typical pedon of Shagnasty very stony loam is located 800 feet West and 1,200 feet North of the Northeast corner of Section 36, T.23-1/2N., R.48E.

The Shagnasty modal profile is in a nearby area of Eureka County, outside the survey boundary. There is only 15 acres of the map unit containing Shagnasty in the survey area.

Soil Profile. There are approximately 3 to 15 percent surface stones.

A11--0 to 3 inches; brown (10YR 5/3) very stony loam, dark brown (10YR 3/3) moist; moderate medium platy structure; slightly hard, friable, slightly sticky, slightly plastic; few very fine roots; few fine and very fine interstitial pores; 5 percent gravel, 10 percent cobbles, and 5 percent stones; mildly alkaline (pH 7.4); abrupt smooth boundary. (3 to 4 inches thick)

A12-- 3 to 5 inches; brown (10YR 4/3) cobbly loam, dark brown (10YR 3.3) moist; weak medium subangular blocky parting to moderate fine granular; soft, very friable, slightly sticky and slightly plastic; common fine and very fine roots; common fine and very fine

interstitial pores; 5 percent gravel, 15 percent cobbles, 5 percent stones; mildly alkaline (pH 7.4); clear smooth boundary. (2 to 5 inches thick)

B21t--5 to 12 inches; brown (10YR 5/3) cobbly clay loam, dark brown (10YR 3/3) moist; strong medium angular blocky; hard, firm, sticky, plastic; common medium and fine roots; common medium and fine tubular and interstitial pores; common thin and few moderately thick pressure faces on peds; 10 percent gravel and 5 percent cobbles; mildly alkaline (pH 7.6); clear smooth boundary. (5 to 7 inches thick)

B22t--12 to 19 inches; yellowish brown (10YR 5/4) clay, dark yellowish brown (10YR 4/4) moist; strong medium angular blocky structure; hard, firm, very sticky, very plastic; common medium and fine roots; common medium and fine tubular pores; many thick pressure faces on peds; 10 percent gravel; mildly alkaline (pH 7.6); clear smooth boundary. (7 to 14 inches thick)

B3tca--19 to 24 inches; light yellowish brown (10YR 6/4) gravelly clay loam, yellowish brown (10YR 5/6) moist; moderate medium angular blocky structure; hard, firm, very sticky and very plastic; common fine and very fine roots; common fine and very fine tubular and interstitial pores; common thin pressure faces on peds; 15 percent gravel and 5 percent cobbles; slightly effervescent matrix, with lime in seams; moderately alkaline (pH 8.0); clear wavy boundary. (5 to 12 inches thick)

Cca--24 to 60 inches; brownish yellow (10YR 6/6) gravelly clay loam, yellowish brown (10YR 5/8) moist; massive; slightly hard, friable, sticky and plastic; common fine and very fine roots; common fine and very fine interstitial pores; few moderately thick pressure faces on peds; 25 percent gravel and 5 percent cobbles; strongly effervescent, lime in seams; moderately alkaline (pH 8.0).

Range in Characteristics. These soils are usually dry; they are moist in the winter and spring months. Mean annual soil temperature is 44° to 46°F. The mollic epipedon is 10 to 16 inches thick and commonly includes the upper part of the

argillic horizon. The solum is 23 to 30 inches thick and depth to secondary carbonates is 17 to 26 inches. Depth to bedrock is 40 to 80 inches.

When mixed, the argillic horizon averages 35 to 50 percent clay modified by 10 to 25 percent gravel and cobbles. The upper part of the solum is noneffervescent and neutral. The lower part of the solum is slightly effervescent or strongly effervescent and mildly alkaline to moderately alkaline.

The A1 horizon has value of 4 or 5 dry, and chroma of 2 or 3.

The B2t horizon has hue of 7.5YR of 10YR. It is clay loam or clay modified by 10 to 25 percent gravel and cobbles. Structure is weak prismatic or strong angular blocky.

The B3tca horizon has hue of 7.5YR or 10 YR; value of 5 or 6 dry, and 4 or 5 moist, chroma of 6 or 8. Particles of free lime range from few to many. Texture is clay loam or clay modified by 15 to 35 percent rock fragments.

Shipley Series

The Shipley series consists of deep well-drained, moderately permeable soils formed in loamy alluvium. They are on smooth, nearly level and gently sloping lake terraces sand alluvial fans. Slopes range from 0 to 4 percent.

A typical pedon of Shipley loam, 0 to 2 percent slope, is located 105 feet East and 800 feet South of the Northwest corner of Section 22, T.15N., R.50E.

Soil Profile.

A1--0 to 6 inches; brown (10YR 5/3) loam, dark brown (10YR 3/3) moist; moderate fine platy structure; zlightly hard, friable, slightly sticky, slightly plastic; few very fine roots; many very fine vesicular interstitial and tubular pores, slightly effervescence; moderately alkaline (pH 8.0); clear smooth boundary. (4 to 8 inches thick)

C1--6 to 8 inches; pale brown (10YR 6/3) silt loam, dark brown (10YR 4/3) moist; massive; slightly hard, friable; slightly sticky, slightly plastic; common very fine and few fine roots; many fine interstitial and common very fine tubular pores, strong effervescense; strongly alkaline (pH 8.6); clear smooth boundary. (10-14 inches thick)

C2--18 to 60 inches; pale brown (10YR 6/3) silt loam, dark brown (10YR 4/3) moist; massive; slightly hard, friable, nonsticky, nonplastic; common very fine and few fine roots; common very fine interstitial and tubular pores, strong effervescence; moderately alkaline (pH 8.1).

Range in Characteristics. These soils are usually dry during most years, but are moist more than 1/4 of the time that soil temperatures are warmer than 41° F. Mean annual soil temperature is 61° to 63° F. Mineralogy is mixed but is influenced by volcanic ash. pH ranges from 8.0 to 9.6 with no distinct trend. The 10- to 40-inch control soil section is dominantly silt loam or very fine sandy loam with 18 to 25 percent clay and more than 15 percent fine sand or coarser. Thin stratification with loam, fine sandy loam or sandy loam is in the control section in some pedons. The soil has value of 7 or 6 dry and 4 or 5 moist, and chroma of 2 or 3. Few fine or medium lime segregations may also occur in any strata below 24 inches. The A1 horizon is massive, or has

strong or moderate, very thin to medium platy structure. It is soft to hard. The C horizon is normally massive but has weak platy or subangular blocky structure in some pedons. It is soft or slightly hard.

Shreek Series

The Shreek series consists of deep, well drained, slowly to very slowly permeable soils on fan terraces. These soils formed in calcareous mixed alluvium. Soils range from 4 to 30 percent.

A typical pedon of Shreek clay loam, 13 percent slope, is located 2,430 North and 1,580 feet West of the Southeast corner of Section 28, T.14N., R.51E.

Soil Profile. Surface has about 30 percent gravel, 10 percent cobbles and 5 percent stones.

A1--0 to 5 inches; brown (7.5YR 5/2) clay loam, dark brown (7.5YR 4/2) moist, moderate medium granular structure; slightly hard, very friable, stricky and very plastic; few very fine roots; 5 percent gravel; neutral (pH 7); clear, smooth boundary. (2 to 7 inches thick)

B2t--5 to 12 inches, reddish brown (5YR 4/4) clay; reddish brown (5YR 4/4) moist; strong medium prismatic structure; extremely hard, firm, very sticky and very plastic; common very fine and few medium roots; few fine tubular pores; 20 percent gravel; 5 percent cobbles; mildly alkaline (pH 7.5); gradual wavy boundary. (6 to 12 inches thick)

B3t--12 to 30 inches; yellowish red (5YR 5/6) extremely cobbly clay, yellowish red (5YR 4/6); moist, strong, fine and medium subangular blocky structure; extremely hard, very friable, very sticky and very plastic; common fine and medium roots; few fine tubular pores; 35 percent gravel; 30 percent cobbles;

violently effervescent, mildly alkaline (pH 7.5); gradual smooth boundary. (12 to 24 inches thick)

C1ca--30 to 46 inches; pink (7.5YR 7/4) gravelly, coarse sandy loam, light brown (7.5 YR 6/5) moist; massive; slightly hard, friable, nonstickty and nonplastic; few fine and very fine roots, 20 percent gravel; moderately alkaline (pH 8.2); clear smooth boundary. (10 to 30 inches thick)

C2ca--46 to 55 inches; pink (7.5YR 7/4) gravelly coarse sandy loam, light brown (7.5YR 6/4) moist, massive, slightly hard, friable, nonsticky and nonplastic; 25 percent gravel; strongly effervescent; moderately alkaline (pH 8.2).

Range in Characteristics. Thickness of the solum ranges from 12 to 35 inches. Depth to calcareous material ranges from 15 to 35 inches. Mean annual soil temperature is 44° F. Coarse fragments average from 35 to 65 percent and clay content is 35 to 55 percent in the control section.

The A horizon has a hue of 5YR or 7.5YR, value of 3 or 4 moist and 5 through 7 dry, and chroma of 2 through 4. It is slightly acid to mildly alkaline. Typically, it is a clay loam but ranges from heavy fine sandy loam or loam to clay loam.

The B2t horizon has hue of 5YR or 7.5YR, value of 4 through 6 dry and 3 through 5 moist, and chroma of 3 through 6. It has weak to strong, fine to coarse, prismatic, subangular blocky or angular blocky strucure. Average particle size distribution of the argillic ranges from 35 to 55 percent clay, 20 to 45 percent sand and 0 to 35 percent silt. It is slightly acid to mildly alkaline.

The Cca horizon has hue of 5YR or 7.5YR. It is mildly alkaline or moderately alkaline.

Udelope Series

The Udelope series consists of well drained soils that are shallow to hard bedrock. The soils formed in residuum of weathered andesite on mountain ridges, benchs, and sideslopes. Slopes are 8 to 50 percent. The mean annual precipitation is about 18 inches. The mean annual temperture is about 43°F.

A typical pedon of Udelope stony loam is located near the head of Nine Mile Canyon, 750 feet East and 1,000 feet South of the Northwest corner of Section 21, T.15N., R.51E.

Soil Profile. Surface has about 2 percent stones, 5 percent cobbles.

A11--0 to 2 inches; dark grayish brown (10YR 4/2) stony loam, very dark brown (10YR 2/2) moist, moderate fine granular structure; slightly hard, very friable, nonsticky and nonplastic; few fine and very fine roots; common very fine tubular and interstitial pores; about 10 percent gravel; neutral (pH 6.6); abrupt smooth boundary. (1 to 3 inches thick)

A11--2 to 5 inches; dark grayish brown (10YR 4/2); very dark brown (10YR 2/2) moist; moderate fine granular structure; slightly hard, friable, nonsticky and slightly plastic; many very fine and fine roots; common very fine and fine tubular pores; about 10 percent gravel; neutral (pH 7.0); clear smooth boundary. (2 to 4 inches thick)

A13--5 to 9 inches; dark grayish brown (10YR 4/2) sandy loam, very dark brown (10YR 2/2) moist; masive; hard, friable, slightly sticky, and slightly plastic; many very fine and fine roots, common medium roots; common very fine and fine tubular pores; about 8 percent gravel; neutral (pH 7.0); abrupt irregular boundary. (4 to 14 inches thick)

R--9 inches; hard, jointed andesite with roots and soil in few thin vertical cracks.

Range in Characteristics. The thickness of the solum ranges from 8 to 15 inches and the depth to bedrock from 8 to 20 inches. The control section has 7 to 18 percent clay and 5 to 35 percent rock fragments. Soil reaction is neutral or mildly alkaline.

The soil is moist in winter and spring and dry in summer and early fall. Soil temperature ranges from 43° to 47° F. Average summer soil temperatue ranges from 55° to 59°F.

The A1 horizon has color value of 4 to 5 dry and 2 or 3 moist. The chroma is 2 or 3. The texture is loam or sandy loam. Clay content ranges from 8 to 18 percent and rock fragment from 5 to 35 percent. A C horizon is present in some pedons.

Umil Series

The Umil series consist of shallow, well drained soils with rapid or moderately rapid permeability in the solum and very low permeability in the duripan. They formed in alluvium and are on sloping alluvial fans and terraces with slopes of 2 to 15 percent.

A typical pedon of Umil loam, 5 percent slope, is located 1,160 feet East and 1,050 feet North of the Southwest corner of Section 13, T.13N., R.50E.

Soil Profile

A11--0 to 3 inches; brown (10YR 5/3) loam, dark grayish brown (10YR 4/2) moist; moderate medium platy

structure parting to weak fine crumb; slightly hard, friable; slightly sticky, slightly plastic; few very fine roots; many fine vesicular pores; strong effervescence; strongly alkaline (pH 8.5); abrupt smooth boundary. (1 to 4 inches thick)

B2--3 to 6 inches; yellowish brown (10YR 5/4) loam, dark yellowish brown (10YR 4/4) moist; weak medium prismatic structure; slightly hard, friable; slightly sticky and plastic; many very fine, common fine and few medium roots; few fine interstitial and tubular pores; about 12 percent gravel; strong effervescence; strongly alkaline (pH 8.6); clear smooth boundary. (2 to 5 inches thick)

Csica--6 to 13 inches; light yellowish brown (10YR 6/4) weakly cemented gravelly loam, yellowish brown (10YR 5/4) moist; massive; slightly hard, friable; slightly sticky and slightly plastic; many very fine, common fine and few medium roots; many fine interstitial and few tubular pores; about 20 percent gravel (subrounded pan fragments); abrupt smooth boundary. (5 to 9 inches thick)

Csicam--13+ inches; light yellowish brown (10YR 7/4) indurated duripan, yellowish brown (10YR 6/4) moist; massive; extremely hard, brittle; fine roots in cracks; many fine intestitial pores; violent effervescence; strongly alkaline (pH 8.5)

Range in Characteristics. Solum thickness and depth to the duripan are 10 to 14 inches. The mean annual soil temperature is 44° to 47°F., and mean summer soil temperature is 60° to 63°F. Umil soils are usually dry but are moist in the winter and spring. pH in the solum increases with increasing depth, and is 8.0 to 9.2.

The A horizon has value of 3 or 4 moist, and chroma of 2 or 3. It has weak or moderate, medium or thick platy structure.

The B2 horizon has hue of 10YR or 7.5YR, value of 5 or 6 dry, 3 or 4 moist, and chroma of 2 through 4. It is loam, fine sandy loam, or sandy loam and has 18 to 25 percent clay. This

horizon has weak or moderate, medium or coarse, prismatic or columnar structure.

Usine Series

The Usine series consists of deep, excessively drained soils with very rapid permeability. These soils formed in very gravelly alluvium on nearly level to moderately steep terrace side slopes with gradients from 9 to 30 percent.

A typical pedon of Usine gravelly loam, 30 percent slope, is located 2,160 feet West and 320 feet South of the Northeast corner of Section 5, T.12N., R.50E.

Soil Profile

A11--0 to 3 inches; grayish brown (10YR 5/2) gravelly loam, dark grayish brown (10YR 4/2) moist; weak medium platy structure; soft, very friable; nonsticky, nonplastic; few fine roots; many fine interstitial pores; about 15 percent gravel; strong effervescence; moderately alkaline (pH 8.0); clear smooth boundary. (2 to 5 inches thick)

A12--3 to 14 inches; pale brown (10YR 6/3) very gravelly sand, dark brown (10YR 4/3) moist; massive; loose, loose; nonsticky, nonplastic; many fine, common medium roots; many fine intestitial pores; about 20 percent gravel and 25 percent cobbles; violent effervescence; moderately alkaline (pH 8.0); clear wavy boundary. (9 to 13 inches thick)

C1--14 to 26 inches; light grayish brown (10YR 6/2) very gravelly sand, dark brown (10YR 4/3) moist; massive; loose; nonsticky, nonplastic; common fine and few medium roots; many fine interstitial pores; about 25 percent gravel and 25 percent cobbles; violent effervescence; moderately alkaline (pH 8.0); clear wavy boundary. (10 to 14 inches thick)

C2--26 to 60 inches; light grayish brown (10YR 6/2) very gravelly sand, dark brown (10YR 4/3) moist; massive; loose; nonsticky, nonplastic; few fine roots; common medium interstitial pores; about 35 percent

gravel and 5 percent cobbles; strong effervescence; moderately alkaline (pH 8.0)

Range in Characteristics. Usine soils are usually dry but are moist in the winter and spring months. The mean annual soil temperature is 46° to 47°F., and the mean summer soil temperature is 62° to 64°F. The soil is violently or strongly effervescent and ranges in pH from 8.0 to 8.8. The A1 horizon has value of 3 or 4 moist, and chroma of 2 or 3. It is massive or has weak, medium or thick platy structure. The C horizon has value of 6 or 7 dry and 4 or 5 moist, and chroma of 2 or 3. Strata of very gravelly loamy sand, coarse sand, or loamy coarse sand are in some pedons.

Vinini Series

The Vinini series consists of shallow, well drained soils with moderately slow permeability in the solum and very slow permeability in the duripan. These soils formed in stony, cobbly and gravelly colluvium and residuum on strongly sloping and moderately steep slopes of uplands with gradients of 8 to 30 percent.

A typical pedon of Vinini gravelly loam, 4 percent slope, is located 1,800 feet West and 2,000 feet South of the Northeast corner of Section 7, T.13N., R.50E.

Soil Profile

A1--0 to 4 inches; pale brown (10YR 6/3) gravelly loam, brown (10YR 4/3) moist; moderate medium platy structure; soft, very friable; slightly sticky, slightly plastic; common very fine and fine roots; many medium vesicular pores; about 15 percent gravel;

mildly alkaline (pH 7.6); clear smooth boundary. (2 to 6 inches thick)

B21t--4 to 10 inches; light yellowish brown (10YR 6/4) very gravelly clay loam, yellowish brown (10YR 5/4) moist; moderate medium prismatic structure; loose; sticky, plastic; few very fine, common fine and few coarse roots; common fine tubular pores; few thin clay skins lining pores; about 40 percent gravel and 10 percent cobbles; slight effervescence; mildly alkaline (pH 7.6); clear wavy boundary. (4 to 6 inches thick)

B22tca--10 to 20 inches; pale brown (10YR 6/3) very gravelly clay loam, brown (10YR 4/3) moist; strong fine subangular structure; loose; sticky, plastic; common very fine and few fine roots; common fine tubular pores; few thin clay films lining interstitial pores; about 30 percent gravel and 15 percent cobbles; strong effervescence; mildly alkaline (pH 7.6); abrupt wavy boundary. (8 to 12 inches thick)

C1casim--20 to 30 inches; pale brown (10YR 6/3) indurated duripan, brown (10YR 4/3) moist; massive; extremely hard, brittle; strong effervescence; mildly alkaline (pH 7.8)

Range in Characteristics. Solum thickness and depth to the duripan are 10 to 20 inches. These soils are usually dry, but are moist during the winter and spring months. The mean annual soil temperature is 45° to 47°F. The A1 horizon has value of 5 through 7 dry, 3 or 4 moist, and chroma of 2 or 3. It has very thin to medium moderate or strong platy structure or it is massive. pH is 7.0 to 8.4. This horizon is commonly slightly effervescent in some subhorizon but is noncalcareous in some pedons. The B2t horizon has value of 5 or 6 dry, 3 through 5 moist, and chroma of 2 through 4. It has strong very fine or fine angular or subangular blocky or moderate fine or

medium prismatic structure. The volume of rock fragments is 35 to 80 percent and clay content is 27 to 35 percent.

Winu Series

The Winu series consists of moderately deep, well drained soils that formed in alluvium and colluvium weathered from mixed volcanic and sedimentary rock. These soils are on concave mountain slopes at elevations of 7,800 feet to 9,200 feet. Slopes are 15 to 50 percent. The mean annual precipitation is about 17 inches and the mean annual temperature is about 42°F.

A typical pedon of Winu gravelly loam is located in an area of the Labshaft-Winu association at approximately 2,300 feet South and 250 feet East of the Northwest corner of Section 24, T.18N, R.53E. The Winu modal profile is in a nearby area of Eureka County, outside the survey boundary. There is less than 50 acres of the map unit containing Winu in the survey area.

Soil Profile

A1--0 to 8 inches; dark grayish brown (10YR 4/2) gravelly loam, very dark brown (10YR 2/2) moist; moderate very fine granular structure; soft, friable sticky, plastic; many fine and very fine roots; many very fine interstitial and many fine tubular pores; 20 percent gravel; neutral (pH 7.0); gradual smooth boundary. (8 to 12 inches thick)

B21t--8 to 16 inches; grayish brown (10YR 5/2) gravelly clay loam, very dark grayish brown (10YR 3.2) moist; moderate medium and fine angular blocky structure; hard, firm, sticky, plastic; few medium, common fine and very fine roots; common very fine interstitial and many fine and very fine tubular pores; common

thin pressure faces on peds; 25 percent gravel; neutral (pH 7.2); clear smooth boundary. (8 to 10 inches thick)

B22t--16 to 22 inches; brown (10YR 4/3) gravelly clay loam, dark brown (10YR 3/3) moist; moderate large and medium angular blocky structure; hard, firm, sticky, plastic; few medium, common fine and very fine roots; common very fine interstitial and many fine and very fine tubular pores; common moderately thick pressure faces on peds; 25 percent gravel; neutral (pH 7.2); clear wavy boundary. (6 to 8 inches thick)

B3t--22 to 32 inches; grayish brown (10YR 5/2) gravelly clay loam, very dark grayish brown (10YR 3/2) moist; moderate large and medium angular blocky structure; hard, firm, sticky, plastic; common fine and very fine roots; common fine and very fine tubular pores; few thin pressure faces on peds; 20 percent gravel and 5 percent cobbles; neutral (pH 7.2); abrupt wavy boundary. (3 to 10 inches thick)

R--32 to 46 inches; andesite bedrock.

Range in Characteristics. These soils are dry in the late summer and autumn. The mean annual soil temperature is 42° to 47°F., and the mean summer soil temperature is 58° to 59°F. Depth to bedrock and solum thickness are 24 to 40 inches. The mollic epipedon is 18 to 26 inches thick. The upper 20 inches of the argillic horizon has 20 to 30 percent clay and 15 to 35 percent coarse fragments. The soils are slightly acid or neutral and become more acid or remain constant with increasing depth.

The A horizon has value of 3 or 4 dry, chroma of 1 or 2. It has granular or subangular blocky structure.

The Bt horizon has hue of 7.5YR or 10YR; value of 4 or 5 dry, and 2 or 3 moist; chroma of 2 or 3. It is gravelly loam,

gravelly clay loam, or gravelly sandy clay loam. It has sub-angular blocky or angular blocky structure.

CLASSIFICATION AND SERIES STATUS

Ados Series (Proposed)
Loamy-skeletal, carbonatic, frigid, Xerollic Paleorthids

Ansping Series (Established)
Loamy-skeletal, carbonatic, frigid Aridic Calcixerolls

Applebush Series (Proposed)
Coarse-loamy, mixed, frigid Xerollic Camborthids

Bucan Variant
Fine, montmorillonitic, frigid Xerollic Haplargids

Buster Series (Established)
Fine-loamy, mixed, frigid Durixerollic Haplargids

Dobrow Series (Established)
Coarse-loamy, mixed Cumulic Cryaquolls. Taxadjunct to the series, thicker mollic epipedon and sandy clay layer in substrata; the use and management is the same.

Fishlake Series (Proposed)
Loamy, mixed, frigid, shallow Xerollic Durargids

Four Star Series (Established)
Coarse-loamy, mixed, frigid Cumulic Haplaquolls

Hackwood Variant

Loamy-skeletal, mixed Pachic Cryoborolls

Harcany Series (Established)
Loamy-skeletal, mixed Pachic Cryoborolls. Taxadjunct to the series, thinner mollic epipedon; the use and management is the same.

Hopeka Series (Established)
Loamy-skeletal, carbonatic, frigid Lithic Xeric Torriorthents. Taxadjunct to the series, slightly thicker solum and has Cr horizon; the use and management is the same.

Hymas Series (Established)
Loamy-skeletal, carbonatic, frigid Lithic Haploxerolls

Labshaft (Established)
Loamy-skeletal, mised Lithic Cryoborolls

Locane Series (Established)
Clayey-skeletal montmorillonitic, frigid Lithic Xerollic Haplargids

Moonshine Series (Proposed)
Loamy, mixed, frigid, shallow Haploxerollic Durargids

Mulligan Series (Proposed)
Loamy-skeletal, mixed Argic Pachic Cryoborolls

Muni Series (Proposed)
Loamy, mixed, frigid, shallow Haploxerollic Durargids

Ney Series (Proposed)
Loamy mixed Argic Lithic Cryoborolls

Packham Variant
Loamy-skeletal, carbonatic, frigid Xerollic Camborthids

Pedoli Series (Established)
Fine-loamy, mixed, frigid, Xerollic Haplargids. Taxadjunct to the series, some pedons have chroma of 4 in the A horizon and less than 15 percent gravel in the B and C horizons; the use and management is the same.

Pernty Series (Established)
Loamy-skeletal, mixed, frigid Lithic Argixerolls. Taxadjunct to the series, some pedons are less than 14 inches deep to a lithic contact and have thinner argillic horizons; the use and management is the same.

Punchbowl Series (Proposed)
Loamy, mixed, frigid Lithic Xerollic Haplargids

Roca Series (Established)
Clayey-skeletal, montmorillonitic, frigid, Xerollic Haplargids

Secret Creek Series (Tentative)
Coarse-loamy, mixed, frigid, Aridic Haploxerolls. Taxadjunct to the series, some pedons have a thicker solum and slightly alkaline C horizons; the use and management is the same.

Segura Series (Proposed)
Loamy, mixed, frigid Lithic Argixerolls

Sevenmile Series (Proposed)
Coarse-loamy, mixed, frigid Torrifluventic Haploxerolls

Shagnasty Series (Proposed)
Fine, montmorillonitic, frigid Aridic Calcic Argixerolls

Shipley Series (Established)
Coarse-loamy, mixed (calcareous), frigid xeric Torriorthents. Taxadjunct to the series, some pedons have a thin, slightly darker epipedon; the use and management is the same.

Shreek Series (Proposed)
Clayey-skeletal. montmorillonitic, frigid, Xerollic Haplargids

Udelope Series (Proposed)
Loamy, mixed Lithic Cryoborolls

Umil Series (established)
Loamy, mixed, frigid, shallow Xerollic Durorthids

Usine Series (Estaablished)
Sandy-skeletal, mixed, frigid Xeric Torriorthents. Taxadjunct to the series, some pedons have 35 to 50 percent rock fragments in the control section; the use and management is the same.

Vinini Series (Established)
Loamy-skeletal, mixed, frigid Xerollic Durargids

Winu Series (Established)
Fine-loamy, mixed Argic Pachic Cryoborolls

ACREAGE AND PROPORTIONATE EXTENT OF SOIL MAP UNITS

Soils were highly variable in the survey area. Forty-two soil map units were described in the Sevenmile Wash area. Except for one map unit, Segura-Pernty complex, which comprised approximately 40,045 acres or 26.75 percent of the survey area, no soil map unit exceeded 10 percent and 39 each occupied less than 5 percent of the area (Table I). Twenty-one soil map units each occupied less than 1 percent or approximately 1,500 acres of the area covered in this survey.

CREDITS

Mr. Arnold Knecht served as Party Leader for the field work of this soil survey. Members of the field party were Messrs. David Stout, Gary Maggio, Conrad Simonson, and Larry Sabata. Mr. Peter Smith, with the assistance of Mr. David Stout, prepared the draft report. Dr. Ralph Luebs edited the final report. Appreciation is expressed for the assistance of Mr. Robert Zimmerman, Nevada Soil Correlator, Soil Conservation Service, during all phases of this survey.

Ralph E. Luebs

Ralph E. Luebs
Chief, Land Resources Division

Reviewed by:

Frank J. Holliday

Frank J. Holliday
Vice President

REL:jms

(10 copies sent)

REFERENCES

U.S. Department of Agriculture, Soil Conservation Service, 1973, "Aids for Estimating Soil Properties Significant to Engineering Interpretations", Utah.

U.S. Department of Agriculture, Soil Conservation Service, 1974, National Soils Handbook.

U.S. Department of Agriculture, Soil Conservation Service, 1975, Soil Taxonomy, Agriculture Handbook No. 436.

GLOSSARY

Alkali soil.
Generally, highly alkaline soil. Specifically, an alkali soil has so high a degree of alkalinity (pH 8.5 or higher) or so high a percentage of exchangeable sodium (15 percent or more of the total exchangeable bases), or both, that the growth of most crop plants is low from this cause.

Alluvium.
Soil materials, such as sand, silt, or clay, that has been deposited on land by stream.

Calcareous soil.
A soil containing enough calcium carbonate (often with magnesium carbonate) to effervesce (fizz) visibly when treated with cold, dilute hydrochloric acid.

Clay.
As a soil separate, the mineral soil particles less than 0.002 millimeter in diameter. As a soil textural class, soil material that is 40 percent or more clay, less than 45 percent sand, and less than 40 percent soil.

Clay film.
A thin coating of clay on the surface of a soil aggregate. Synonyms: clay coat, clay skin.

Consistence, soil.
The feel of the soil and the ease with which a lump can be crushed by the fingers. Terms commonly used to describe consistence are:

Loose.--Noncoherent when dry or moist; does not hold together in a mass.

Friable.--When moist, crushes easily under gentle pressure between thumb and forefinger, but resistance is distinctly noticeable.

Firm.--When moist, crushes under moderate pressure between thumb and forefinger, but resistance is distincly noticeable.

Plastic. When wet, readily deformed by moderate pressure but can be pressed into a lump; will form a "wire" when rolled between thumb and forefinger.

Sticky.--When wet, adheres to other material, and tends to stretch somewhat and pull apart, rather than to pull free from other material.

Hard.--When dry, moderately resistant to pressure; can be broken with difficulty between thumb and forefinger.

Soft.--When dry, breaks into powder or individual grains under very slight pressure.
Cemented.--Hard and brittle; little affected by moistening.

Depth, soil.
To bedrock or to materials that restrict root development of common plants. Deep: more than 40 inches; moderately deep: 20 to 40 inches; shallow: 10 to 20 inches.

Drainage class. (natural)
Refers to the conditions of frequency and duration of perids of saturation or partial saturation that existed during the development of the soil, as opposed to altered drainage, which is commonly the result of artificial drainage or irrigation but may be caused by the sudden deepening of channels or the blocking of drainage outlets. Seven different classes of natural soil drainage are recognized.

Excessively drained soils are commonly very porous and rapidly permeable and have a low available water capacity.
Somewhat excessively drained soils are also very perveable and are free from mottling throughout their profile.
Well drained soils are nearly free from mottling and are commonly of intermediate texture.
Moderately well drained soils commonly have a slowly permeable layer in or immediately beneath the solum. They have uniform color in the A and upper B horizons and mottling in the lower B and the C horizons.
Somewhat poorly drained soils are wet for significant periods but not all the time, and some soils commonly have mottling at a depth below 6 to 16 inches.
Poorly drained soils are wet for long periods and are light gray and generally mottled from the surface downward, although mottling may be absent or nearly so in some soils.
Very poorly drained soils are wet nearly all the time. They have a dark-gray or black surface layer and are gray or light gray, with or without mottling, in the deeper parts of the profile.

Erosion.
The wearing away of the land surface by wind (sandblast), running water, and other geological agents.

Horizon, soil.
A layer of soil, approximately parallel to the surface, that has distinct characteristics produced by soil-forming processes. These are the major horizons:

O horizon.--The layer of organic matter on the surface of a mineral soil. This layer consists of decaying plant residues.

A horizon.--The mineral horizon at the surface or just below an O horizon. This horizon is the one in which living organisms are most active and therefore is marked by the accumulation of humus. The horizon may have lost one or more of soluble salts, clay, and sesquioxides (iron and aluminum oxides).

B horizon.--The mineral horizon below an A horizon. The B horizon is in part a layer of change from the overlying A to the underlying C horizon. The B horizon also has distinctive characteristics caused (1) by accumulation of clay, sesquioxides, humus, or some combination of these; (2) by prismatic or blocky structure; (3) by redder or stronger colors than the A horizon; or (4) by some combination of these. Combined A and B horizons are usually called the solum, or true soil. If a soil lacks a B horizon, the A horizon alone is the solum.

C horizon.--The weathered rock material immediately beneath the solum. In most soils this material is presumed to be like that from which the overlying horizons were formed. If the material is known to be different from that in the solum, a Roman numeral precedes the letter C.

R layer.--Consolidated rock beneath the soil. The rock usually underlies a C horizon but may be immediately beneath an A or B horizon.

Parent Material.
Disintegrated and partly weathered rock from which soil has formed.

Pedon.
The smallest volume that can be called "a soil". A pedon is three dimensional and large enough to permit study of all horizons. Its area ranges from about 10 to 100 square feet (1 square meter to 10 square meters), depending on the variability of the soil.

Permeability.
The quality that enables the soil to transmit water or air. Terms used to describe permeability are as follows: very slow, slow, moderately slow, moderate, moderately rapid, rapid, and very rapid.

Profile soil.
A vertical section of the soil through all its horizons and extending into the parent material.

Reaction, soil.
The degree of acidity or alkalinity of a soil, expressed in pH values. A soil that tests to pH 7.0 is precisely neutral in reaction because it is neither acid nor alkaline. An acid, or "sour", soil is one that gives an acid reaction; an alkaline soil is one that is alkaline in reaction. In words, the degrees of acidity or alkalinity are expressed thus:

	pH		pH
Extremely acid	Below 4.5	Neutral	6.6 to 7.3
Very strongly acid	4.5 to 5.0	Mildly alkaline	7.4 to 7.8
Strongly acid	5.1 to 5.5	Moderately alkaline	7.9 to 8.4
Medium acid	5.6 to 6.0	Strongly alkaline	8.5 to 9.0
Slightly acid	6.1 to 6.5	Very strongly alkaline	9.1 and higher

Sand.
Individual rock or mineral fragments in a soil that range in diameter from 0.05 to 2.0 millimeters. Most sand grains consist of quartz, but they may be of any mineral composition. The textural class name of any soil that contains 85 percent sand.

Silt.
Individual mineral particles in a soil that range in diameter from the upper limit of clay (0.002 millimeter) to the lower limit of very fine sand (0.05 millimeter). Soil of the silt textural class is 80 percent or more silt and less than 12 percent clay.

Soil.
A natural, three-dimensional body on the earth's surface that supports plants and that has properties resulting from the integrated effect of climate and living matter acting on earth parent material, as conditioned by relief over periods of time.

Structural Soil.
The arrangement of primary soil particles into compound particles or clusters that are separated from adjoining aggregates and have properties unlike those of an equal mass of unaggregated primary soil particles. The principal forms of soil structure are--platy (laminated), prismatic (vertical axis of aggregates longer than horizontal), columnar (prisms with rounded tops), blocky (angular or subangular), and granular. Structureless soils are either single grained (each grain by itself, as in dune sand) or massive (the particles adhering together without any regular cleavage, as in many claypans and hardpans).

Terrace (geological).
An old alluvial plain, ordinarily flat or undulating, bordering a river, lake, or the sea. Stream terraces are frequently called second bottoms, as contrasted to flood plains, and are seldom subject to overflow. Marine terraces were deposited by the sea and are generally wide.

Textural, soil.
The relative proportions of sand, silt, and clay particles in a mass of soil. The basic textural classes, in order of increasing proportion of fine particles, are sand, loamy sand, sandy loam, loam, silt loam, silt, sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay, and clay. The sand, loamy sand, and sandy loam classes may be further divided by specifying "coarse", "fine", or "very fine".

N

SCALE: 1:100,000

LEGEND

SOILS ON MOUNTAINS THAT ARE DOMINANTLY VERY STEEPLY SLOPING, SHALLOW AND DEEP AND VERY POORLY DRAINED AND WELL DRAINED

1. NEY-MULLIGAN-UDELOPE
2. SEGURA - PERNTY

SOILS ON MOUNTAIN TERRACES THAT ARE NEARLY LEVEL TO VERY STEEP, SHALLOW AND DEEP, AND WELL DRIANED

3. PEDDLI - MOONSHINE - SHREEK
4. DIANA-SEGURA-SNOWBALL

SOILS ON FANS THAT ARE NEARLY LEVEL TO STEEP, SHALLOW AND DEEP AND WELL DRAINED

5. UMIL - VININI - BUSTER
6. UMIL - PEDDLI - FISHLAKE

SOILS ON FLOOOPLAINS THAT ARE LEVEL TO NEARLY LEVEL, DEEP AND WELL DRAINED

7. SEVENMILE-SHIPLEY

ANTELOPE RANGE

Sevenmile Wash

Dry Valley

Crested Wheat Bridge

Moonshine Creek

Fork

Indian

Bills Peak 5473

Job No. 19714 | Prepared by: P.L.S. | Date: 2/7/80

GENERAL SOIL MAP

SEVENMILE WASH
NYE COUNTY, NEVADA

FIG. 1

Job No. 19714

Sheet 1 of 3

TABLE I

AREA AND PROPORTIONATE EXTENT OF SOIL MAP UNITS

MAP UNIT No.	MAP UNIT Name	AREA (Acres)	EXTENT (Percent)
111	Rock outcrop-Punchbowl association	715	.48
121	Umil-Fishlake association	1220	.82
123	Umil loam, 2 to 8 percent slopes	3605	2.41
124	Umil-Applebush association	7450	4.98
125	Umil-Vinini-Buster association	9080	6.07
127	Umil-Buster-Muni association	1645	1.10
131	Sevenmile-Applebush association	2310	1.54
132	Sevenmile association	210	.14
141	Applebush sandy loam, 0 to 2 percent slopes, flooded	925	.62
162	Fishlake-Pedoli association	4395	2.94
163	Fishlake-Buster association	685	.46
164	Fishlake-Pedoli-Umil association	870	.58
171	Ney-Mulligan-Udelope association	14045	9.38
172	Ney-Pernty-Mulligan association	4240	2.83
182	Buster-Shreek association	540	.36
191	Pedoli-Shipley association	960	.64
192	Pedoli-Buster-Applebush association	2005	1.34
193	Pedoli-Applebush association	1270	.85
194	Pedoli-Muni-Punchbowl association	715	.48
195	Pedoli-Shreek-Locane association	3825	2.56

TABLE I
(Con't.)

AREA AND PROPORTIONATE EXTENT OF SOIL MAP UNITS

MAP UNIT No.	MAP UNIT Name	AREA (Acres)	EXTENT (Percent)
201	Hackwood Variant-Harcany-Mulligan association	3510	2.35
211	Segura-Pernty complex	40045	26.75
212	Segura-Pernty-Rock outcrop complex	10350	6.91
213	Segura-Punchbowl-Locane association	6630	4.43
241	Usine-Fishlake-Umil association	755	.50
261	Shipley loam, 0 to 4 percent slopes	645	.43
281	Dobrow loam, 2 to 4 percent slopes	85	.06
291	Bucan Variant-Locane-Segura association	1085	.72
310	Shreek-Vinini association	1335	.89
311	Shreek clay loam, 8 to 30 percent slopes	1275	.85
330	Hopeka-Ados-Rock outcrop association	80	.05
331	Hopeka-Packham Variant association	3240	2.16
360	Punchbowl-Segura-Locane association	4225	2.82
362	Punchbowl-Locane-Pedoli association	1090	.73
363	Punchbowl-Fishlake association	2900	1.94
364	Punchbowl-Locane association	3915	2.62
371	Four Star-Sevenmile association	1890	1.26
401	Moonshine-Fishlake-Umil association	4040	2.70
412	Shagnasty-Roca-Rock outcrop association	15	.01

TABLE I
(Con't.)

AREA AND PROPORTIONATE EXTENT OF SOIL MAP UNITS

MAP UNIT No.	MAP UNIT Name	AREA (Acres)	EXTENT (Percent)
420	Secret Creek-Buster-Punchbowl association	1800	1.20
471	Labshaft-Winu association	45	.03
501	Hymas-Ansping association	15	.01
	TOTAL	149,680	100.00

APPENDIX A

MAP UNIT DESCRIPTION AND INTERPRETATION FORMS

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY 111

USDA-SCS

SOIL SURVEY AREA: Nye Co Greenwater Wash MLRA: 28 DATE: 8/3/79 BY: CAK

SOIL MAP UNIT SYMBOL AND NAME: (111) Rock outcrop-Punchbowl Association Revised: 1/[illegible] AS, DMS

1.00 SETTING Undulating summits on isolated rock remnants of Andesitic Tuff surrounded by rock escarpments. AAP 8" AAAT 60°F FFS 75days, Elev 7000' most of the ppt falls in winter & spring, Summers are warm & dry, vegetation sparse shrubs & junipers.

2.00 MAP UNIT COMPOSITION

MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10 Rock Outcrop, andesite	70	Escarpment & flat rock exposures with some stair-stepping; 5 to 70% slopes	Black sagebrush, Juniper, blue grama
2.20 Punchbowl sandy loam, 4 to 15 percent slopes - Loamy, mixed, frigid Lithic Xerollic Haplargids	25	Formed in residium of Rhyolite Tuff - on concave upland; 4 to 15 percent slopes	Black sagebrush, needleandthread, Indian ricegrass, mustard
2.30			

CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40 Loamy-skeletal, mixed, frigid Xeric Torriorthents	5	3	5	Footslope at escarpment base; 15-30 percent slopes	Deep, skeletal, lacks argillic B
2.50					
2.60					

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Rock outcrop, andesite

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
—	—	—	—	—	—	—	—	—	—	—	—

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
—	—	—	—	—	—	—	—	None	—	—	—	—	—

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
—	—	—	—	—	—	—	—	5

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10:

3.20 MAJOR COMPONENT NAME: Punchbowl sandy loam, 4 to 15 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-3	SL	0	0	SM-SC, SM	A-2-4, A-4	1,F,GR	SO	VFR	7.4 - 7.8		
3-7	SCL	0	0	SM-SC, SM	A-4, A-6	2,M,SBK	H	FI	7.9 - 8.4		
7-11	GR-CL	0	30	CL, ML	A-7-6, A-6	M	VH	VFI	7.9 - 8.4		
11+	UWB	0	0								

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-3	2.0-6.0	.11-.13		low	.37	1	D	NONE	—	—	>6.0	—	—
3-7	0.2-0.6	.14-.16		moderate									
7-11	.06-0.2	.11-.13		moderate									
11+													

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
3	Low - Mod.	High	High	Low	Moderate	10-20	—	Hard

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20: Very shallow Haplargids & Torriorthents, 5-15% slopes. Lithic Xeric Torriorthents, loamy, mixed, frigid, 4 to 15 percent slopes.

3.30 MAJOR COMPONENT NAME:

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS

3.31 NONCONTRASTING INCLUDED SOILS WITH 3.30:

Footnote:

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.) W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE

G	Gravel
SG	Sandy gravel
S	Sand
COS	Coarse sand
FS	Fine sand
VFS	Very fine sand
LCOS	Loamy coarse sand
LS	Loamy sand
LFS	Loamy fine sand
LVFS	Loamy very fine sand
COSL	Coarse sandy loam
SL	Sandy loam
FSL	Fine Sandy Loam
VFSL	Very fine sandy loam
SIC	Silty Clay
C	Clay
SICL	Silty clay loam
CL	Clay loam
L	Loam
SIL	Silt loam
SCL	Sandy clay loam
UWB	Unweathered bedrock
WB	Weathered bedrock

HORIZON TEXTURE MODIFIERS

CB	Cobbly
CBA	Angular Cobbly
CBV	Very cobbly
FL	Flaggy
GR	Gravelly
GRC	Coarse gravelly
GRF	Fine gravelly
GRV	Very gravelly
ST	Stratified
ST	Stony
STV	Very stony
STE	Extremely stony

STRUCTURE

SG	Single grain
1	Weak
2	Moderate
3	Strong
VF	Very fine
F	Fine
M	Medium
C	Coarse
VC	Very coarse
GR	Granular
CR	Crumb
PL	Platy
PR	Prismatic
ABK	Angular blocky
SBK	Subangular blocky
M	Massive

CONSISTENCE

Dry:

LO	Loose
SO	Soft
SH	Slightly hard
H	Hard
VH	Very hard
EH	Extremely hard

Moist:

LO	Loose
VFR	Very friable
FR	Friable
FI	Firm
VFI	Very firm
EFI	Extremely firm

A-1

SOIL MAP UNIT INTERPRETATION - ORDER - 3

USOA-SCS

SOIL MAP UNIT SYMBOL AND NAME: Rock outcrop - Punchbowl Association (111)

PRESENT MAJOR LAND USES: Range

POTENTIAL FORESEEABLE USES: See below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR.						
NIRR.	8s	7s		6e		
SUITABILITY FOR RANGE SEEDING		VERY POOR - ROOT ZONE AWC				
Shallow Excavations		SEVERE - DEPTH TO ROCK				
Local Streets + Roads		SEVERE - DEPTH TO ROCK, LOW STRENGTH				
Roadfill		POOR-AREA RECLAIM LOW STRENGTH, THIN LAYER				
Sand Source		IMPROBABLE - EXCESS FINES, THIN LAYER				
Gravel Source		IMPROBABLE - EXCESS FINES, THIN LAYER				
Pond Reservoir Areas		SEVERE - DEPTH TO ROCK				
Embankments, Dikes, Leeves		8-15%, SEVERE - DEPTH TO ROCK, SLOPE; SEVERE - THIN LAYER				

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX	SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE		Herb Plts		Shrubs	
2.10 Rock outcrop		None				-		-	
2.20 Punchbowl, 4-15%		None				Poor		Poor	
2.30									
2.40									
2.50									
2.60									

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS 2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
Indian ricegrass	ORHY		5-10		5-10		
basin wildrye	LECI2		1-5		1-5		
blue bunch wheatgrass	AGSP		5-10		5-10		
blue grama	BOGR2		1-5		-		
cattlebrush Squirreltail	SIHY		1-5		-		
galleta	HIJA		1-5		1-5		
needle-and-thread	STCO-4		5-10		5-10		
Send. dropseed	SPCR		-		1-5		
Sandberg bluegrass	POSE		1-5		1-5		
buckwheat	ERIOG		1-2		1-5		
Globe mallow	SPHAE		1-2		1-5		
milk vetch	ASTRA		-				
penstemon	PENST		1-2		1-5		
phlox	PHLOX		1-2		1-5		
prince's plum	STANL		1-2		1-5		
native annuals	AAFF		1-2		1-5		
black sagebrush	APARN		20-30		20-25		
Wyoming big sagebrush	ARTRW		1-2		-		
Mountain big sagebrush	ARTRV		1-2		1-5		
bud sagebrush	ARSPS		5-10		2-5		
Cacti			-		1-5		
ephedra	EPHED		1-2		1-5		
Torrey's saltbush	ATCA2		2-5		0-5		
Little leaf horse brush	TIGL		1-2		1-5		
Shadscale	ATCO		1-2		-		
Skunkbush sumac	RHTR		-		-		
Spiny hopsage	GRSP		1-2		1-2		
Small rabbitbrush	CHVI5		-		1-5		
Winter fat	EULA5		5-10		1-5		
Yucca	YUCCA		1-2		1-5		
RANGE SITE NAME OR NUMBER		—	NV-D28-11		NV-D28-16		
POTENTIAL PRODUCTION LBS. AC. DRY WT. FAVORABLE YEARS			650		500		
NORMAL YEARS			350		270		
UNFAVORABLE YEARS			175		175		

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2:

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY

121

USDA-SCS

SOIL SURVEY AREA: Nye Co Sarcmile Wash MLRA: 28 DATE: 8/29/79 BY: A.K

SOIL MAP UNIT SYMBOL AND NAME: 121 Umil - Fishlake (P) Association Revised 12/5/80 RS CMS

1.00 SETTING Old Terrace remnant, variously dissected by gully, drainage from upper fan surface. Landform is long, narrow breaks are steeper, more eroded, interfluves flat, tendency to accumulate material. MAP 8" MAAT 50°F EFS 75 days. Elev 4500', most of the ppt. falls in winter and spring, Summers are warm and dry, vegetation is sparse-

2.00 MAP UNIT COMPOSITION

MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	X IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10 Umil loam, 2 to 15 percent slopes - loamy, mixed, frigid, shallow Xerollic Durorthids	60	steeper slopes on Terraces; Old alluvium; 2-15 percent slopes	~~Wyoming big sagebrush~~, Black sagebrush - galleta
2.20 Fishlake sandy loam, 2 to 8 percent slopes - loamy, mixed frigid, shallow Xerollic Durargids	30	Gentle sloping Terrace Tops & Interfluves; Old alluvium, 2-8% convex slopes	Black sagebrush, Wyoming-big sagebrush in interfluves and drainages
2.30			

CONTRASTIND INCLUDED SOILS AND/OR LAND AREAS	X IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40 -Coarse-loamy, mixed (calcareous), frigid Xeric Torriorthents, 2 to 8 percent slopes, flooded	8	2	25	Small drainageways, concave shaped & flat 2 to 8 percent slopes	Deep, coarse loamy, lacks duripan and argillic B or cambic B. Occasional flooding.
2.50 Loamy-skeletal, mixed (calcareous), frigid Xeric Torriorthents, 8 to 15 percent slopes	2	2	5	Terrace at Escarpment Edge; 8 to 15 % slopes	Very shallow, lacks duripan and argillic B or cambic B
2.60					

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Umil loam, 2 to 15 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-3	L	0	0	ML	A-4	2,M,PL	SH	FR	7.9-9.0		
3-6	L	0	15	CL-ML, ML	A-4	1,F,CR	SH	FR	7.9-9.0		
6-13	GR-L	20	10	CL-ML, ML	A-4	M	SH	FR	7.9-9.0		
13+	IND					M	EH	EFI			

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-3	0.6-2.0	.16-.18		LOW	.43	1	D	NONE	—	—	>5.0	—	—
3-6	0.6-2.0	.14-.16		LOW									
6-13	0.6-2.0	.13-.15		LOW									
13+													

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK CEMENTED PAN THICKNESS	CEMENTED PAN OR BEDROCK BEDROCK HARDNESS
4L	LOW-HIGH	MODERATE	LOW	LOW	MODERATE	10-14	THICK	—

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10: Very shallow Durorthids

3.20 MAJOR COMPONENT NAME: Fishlake sandy loam, 2 to 8 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-5	SL	0	0	SM	A-4, A-2-4	1,C,PL	SO	VFR	6.6-7.3		
5-10	CL	0	0	ML, CL	A-6, A-4	2,M,SBK	SH	VFR	6.6-7.3		
10-18	L	0	0	ML, CL, CL-ML	A-6, A-4	2,M,SBK	SH	VFR	7.4-7.8		
18+	IND					M	EH	EFI	7.9-8.4		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-5	2.0-6.0	.14-.16		LOW	.32	1	D	NONE	—	—	>5.0	—	—
5-10	0.2-0.6	.19-.21		MODERATE									
10-18	0.6-2.0	.16-.18		MODERATE									
18+													

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK CEMENTED PAN THICKNESS	CEMENTED PAN OR BEDROCK BEDROCK HARDNESS
3	LOW-MODERATE	HIGH	HIGH	LOW	MODERATE	10-20	THICK	—

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20: Very Shallow Durargids

3.30 MAJOR COMPONENT NAME:

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK CEMENTED PAN THICKNESS	CEMENTED PAN OR BEDROCK BEDROCK HARDNESS

3.31 NONCONTRASTIND INCLUDED SOILS WITH 3.30:

Footnotes:

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.)
W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE

G	Gravel
SG	Sandy gravel
S	Sand
COS	Coarse sand
FS	Fine sand
VFS	Very fine sand
LCOS	Loamy coarse sand
LS	Loamy sand
LFS	Loamy fine sand
LVFS	Loamy very fine sand
COSL	Coarse sandy loam
SL	Sandy loam
FSL	Fine Sandy Loam
VFSL	Very fine sandy loam
SIC	Silty Clay
C	Clay
SICL	Silty clay loam
CL	Clay loam
L	Loam
SIL	Silt loam
SCL	Sandy clay loam
UWB	Unweathered bedrock
WB	Weathered bedrock

HORIZON TEXTURE MODIFIERS

CB	Cobbly
CBA	Angular Cobbly
CBV	Very cobbly
FL	Flaggy
GR	Gravelly
GRC	Coarse gravelly
GRF	Fine gravelly
GRV	Very gravelly
ST	Stratified
ST	Stony
STV	Very stony
STX	Extremely stony

STRUCTURE

SG	Single grain
1	Weak
2	Moderate
3	Strong
VF	Very fine
F	Fine
M	Medium
C	Coarse
VC	Very coarse
GR	Granular
CR	Crumb
PL	Platy
PR	Prismatic
ABK	Angular blocky
SBK	Subangular blocky
M	Massive

CONSISTENCE

Dry:

LO	Loose
SO	Soft
SH	Slightly hard
H	Hard
VH	Very hard
EH	Extremely hard

Moist:

LO	Loose
VFR	Very friable
FR	Friable
FI	Firm
VFI	Very firm
EFI	Extremely firm

SOIL MAP UNIT INTERPRETATION - ORDER - 3

USDA-SCS

SOIL MAP UNIT SYMBOL AND NAME: Umil - Fishlake Association -121

PRESENT MAJOR LAND USES: Range

POTENTIAL FORESEEABLE USES: See below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR.				4e		
NIRR.	7S	7S		[redacted]	7S	
SUITABILITY FOR RANGE SEEDING	VERY POOR - ROOT ZONE	VERY POOR - ROOT ZONE		POOR - PRECIPITATION		
Shallow excavations	SEVERE - CEMENTED PAN	SEVERE - CEMENTED PAN		SLIGHT		
Local streets and roads	SEVERE - CEMENTED PAN	SEVERE - CEMENTED PAN, LOW STRENGTH		MODERATE - FLOODS LOW STRENGTH, FROST ACTION		
road fill	POOR - THIN LAYER	POOR - THIN LAYER, LOW STRENGTH		FAIR - LOW STRENGTH		
Sand source	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER		IMPROBABLE - EXCESS FINES		
gravel source	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER		IMPROBABLE - EXCESS FINES		
Pond RESERVOIR AREAS	SEVERE - CEMENTED PAN 8-15%: SEVERE - CEMENTED PAN, SLOPE	SEVERE - CEMENTED PAN		[redacted] 3-8%: MODERATE SLOPE		
EMBANKMENTS, DIKES, LEVEES	SEVERE - THIN LAYER, PIPING	SEVERE - THIN LAYER, PIPING		SEVERE - PIPING		

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX	SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE Grain & Seed	Grass & Leg.	Wild. Herb.		Shrubs
2.10 Umil		NONE				Poor		Poor
2.20 Fishlake		NONE				FAIR		FAIR
2.30								
2.40 Coarse loamy mixed (calcareous) frigid Xeric Torriorthents		NONE		POOR	POOR	FAIR		FAIR
2.50 Loamy-skeletal mixed frigid Xeric Torriorthents		NONE				VAR		VAR
2.60								

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME *	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS 2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
pine Bluegrass	POSC	-	-		7	7	
basin wildrye	ELCI2	2-5	2-5				
bluebunch wheatgrass	AGSP	5-10	5-10		3	3	
blue grama	BOGR2	1-5	1-5				
bottlebrush squirreltail	SIHY	1-5	1-5		3	3	
galleta	HIJA	1-5	1-5		2	2	
Indian ricegrass	ORHY	5-10	5-10		12	12	
needle and thread	STCO4	2-5	2-5		7	7	
Sandberg bluegrass	POSE	1-5	1-5		2	2	
Sand dropseed	SACR	1-5	1-5				
Western wheatgrass	AGSM	1-5	1-5				
Thurber needlegrass	STTH2	-	-		4	4	
forbs	-	-	-		15	15	
milkvetch	ASTRA	1-2	1-2				
penstemon	PENST	1-2	1-2				
phlox	PHLOX	1-2	1-2				
Princes plume	STANL	1-2	1-2				
native annuals	AAFF	1-2	1-2			2	
Douglas rabbitbrush	CHVI8	-	-				
Green rabbitbrush	CHVIS4	-	-				
Basin big sagebrush	ARTRT	1-2	1-2				
Wyoming big sagebrush	ARTRW	1-2	1-2		25	25	
black sagebrush	ARARN	20-30	20-30				
bud sagebrush	ARSPS	- no number	no number -				
cacti		1-2	1-2				
spineless horsebrush	TECA2	-	-		2	2	
Ephedra	EPHED	1-2	1-2		8	8	
four wing saltbush	ATCA2	1-2	1-2		2	2	
Winterfat	EULA5	5-10	5-10		4	4	
SPINY HOPSAGE	GRSP	-	-				
RANGE SITE NAME OR NUMBER		NV-D28-11	NV-D28-11		NV-D-28	NV-D-28	
POTENTIAL PRODUCTION LBS. AC. DRY WT. FAVORABLE YEARS		775	775		800	800	
POTENTIAL PRODUCTION LBS. AC. DRY WT. NORMAL YEARS		450	450				
POTENTIAL PRODUCTION LBS. AC. DRY WT. UNFAVORABLE YEARS		225	225		400	400	

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2:

123

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY

USDA-SCS

SOIL SURVEY AREA: [illegible] - Sevenmile Creek Area MLRA 29 DATE: [illegible] BY: [illegible]

SOIL MAP UNIT SYMBOL AND NAME: 123-Umil loam, 2 to 8 % slopes Revised: 11/30/10 DMS RS

1.00 SETTING [illegible] Dissected Terraces with [illegible] MAP 8"-12" MAAT 50°F, FFS [illegible] Thin [illegible] vegetation is sparse shrubs.

2.00 MAP UNIT COMPOSITION

	MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10	Umil loam, 2 to 8 percent slopes - loamy, mixed, frigid, shallow Xerollic Durorthids	95	Formed in alluvium on [illegible] with inclusions of [illegible] 2-8 % slopes	Black sagebrush, galleta, [illegible] rabbitbrush
2.20				
2.30				

	CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40	- Coarse-loamy, mixed (calcareous), frigid Xeric Torriorthents, 4 to 8 percent slopes	3	2	5	stream channel areas - V shaped; 4-8% slopes	lacks duripan, moderately deep soils lacks calcic and/or cambic horizon
2.50	Shipley loam, 0 to 4 percent slopes Coarse-loamy, mixed (calcareous), frigid	2	2	3	narrow inset fans and small ponded areas 0-4% slope	lacks duripan, usually deep soils, lacks calcic and/or cambic horizon. Minnecton
2.60						

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Umil loam

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-3	L	0	0	ML	A-4	2, M, PL	SH	FR	7.9-9.0		
3-6	L	0	15	CL-ML, ML	A-4	1, F, CR	SH	FR	7.9-9.0		
6-13	GR-L	20	10	CL-ML, ML	A-4	M	SH	FR	7.9-9.0		
13+	IND					M	EH	EFI			

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTH
0-3	0.6-2.0	.16-.18		LOW	.37	1	D	NONE	—	—	>5.0	—	—
3-6	0.6-2.0	.14-.16		LOW									
6-13	0.6-2.0	.13-.15		LOW									
13+													

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
4L	LOW-HIGH	MODERATE	HIGH	LOW	MODERATE	10-14	THICK	—

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10: Umil SL + Umil GR. SL (on sideslopes), 8 to 15 percent slopes; Fishlake, 2 to 4 % slopes, loamy, mixed, frigid, shallow Xerollic Durargids.

3.20 MAJOR COMPONENT NAME:

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20:

3.30 MAJOR COMPONENT NAME:

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS

3.31 NONCONTRASTINO INCLUDED SOILS WITH 3.30:

Footnotes:

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.) W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE

G	Gravel
SG	Sandy gravel
S	Sand
COS	Coarse sand
FS	Fine sand
VFS	Very fine sand
LCOS	Loamy coarse sand
LS	Loamy sand
LFS	Loamy fine sand
LVFS	Loamy very fine sand
COSL	Coarse sandy loam
SL	Sandy loam
FSL	Fine Sandy Loam
VFSL	Very fine sandy loam
SIC	Silty Clay
C	Clay
SICL	Silty clay loam
CL	Clay loam
L	Loam
SIL	Silt loam
SCL	Sandy clay loam
UWB	Unweathered bedrock
WB	Weathered bedrock

HORIZON TEXTURE MODIFIERS

CB	Cobbly
CBA	Angular Cobbly
CBV	Very cobbly
FL	Flaggy
GR	Gravelly
GRC	Coarse gravelly
GRF	Fine gravelly
GRV	Very gravelly
ST	Stratified
ST	Stony
STV	Very stony
STX	Extremely stony

STRUCTURE

SG	Single grain
1	Weak
2	Moderate
3	Strong
VF	Very fine
F	Fine
M	Medium
C	Coarse
VC	Very coarse
GR	Granular
CR	Crumb
PL	Platy
PR	Prismatic
ABK	Angular blocky
SBK	Subangular blocky
M	Massive

CONSISTENCE

Dry:

LO	Loose
SO	Soft
SH	Slightly hard
H	Hard
VH	Very hard
EH	Extremely hard

Moist:

LO	Loose
VFR	Very friable
FR	Friable
FI	Firm
VFI	Very firm
EFI	Extremely firm

E-2

SOIL MAP UNIT INTERPRETATION - ORDER - 3

USDA-SCS

SOIL MAP UNIT SYMBOL AND NAME: 123 Umil Taxic loam, 2 to 8 percent slopes

PRESENT MAJOR LAND USES: Range

POTENTIAL FORESEEABLE USES: See below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR. NIRR.	7S			4e	4e	
SUITABILITY FOR RANGE SEEDING (Interim Guide for Rating Soils)	VERY POOR - ROOT ZONE,			POOR - PRECIPITATION	Poor: Precipitation	
Shallow excavations	SEVERE - CEMENTED PAN			SLIGHT	SLIGHT	
local streets and roads	SEVERE - CEMENTED PAN			MODERATE - FLOODS LOW STRENGTH, FROST ACTION	MODERATE - FLOODS, LOW STRENGTH, FROST A	
road fill	POOR - THIN LAYER			FAIR - LOW STRENGTH	FAIR - LOW STRENGTH	
Sand Source	IMPROBABLE - EXCESS FINES, THIN LAYER			IMPROBABLE - EXCESS FINES	IMPROBABLE - EXCESS FINES	
Gravel Source	IMPROBABLE - EXCESS FINES, THIN LAYER			IMPROBABLE - EXCESS FINES	IMPROBABLE - EXCESS FINES	
Pond Reservoir Areas	SEVERE - CEMENTED PAN			4-8%: MODERATE SLOPE	GOOD	
Embankments, Dikes, Levees	SEVERE - THIN LAYER, PIPING			SEVERE - PIPING	SEVERE - PIPING	

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	POTENTIAL PRODUCTIVITY SITE INDEX	SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE Grain & Seed Crop	Dom. Grass & Leg	Herb Pits		Shrubs	
2.10 Umil		NONE				Poor		Poor	
2.20									
2.30									
2.40 Coarse-loamy, mixed, calcareous, Frigid Xeric Torriorthents		NONE		Fair	Fair	Fair		Fair	
2.50 Coarse-silty, mixed, frigid Xeric Torriorthents		NONE		VAR	VAR	VAR		VAR	
2.60									

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME X	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS 2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
Alkali sacaton	SPAI	-			5-10	-	
basin wildrye	ELCI	2-5			5-15	1-2	
blue bunch wheatgrass	AGSP	5-10			1-5	2-5	
blue grama	BOGR2	1-5			1-5	-	
bottle brush Squirreltail	SIHY	1-5			1-5	2-5	
galleta	HIJA	1-5			-	1-2	
Indian ricegrass	ORHY	5-10			1-5	10-15	
needle and thread	STCOM	2-5			2-5	5-10	
Sandberg bluegrass	POSE	1-5			1-5	1-2	
Sand dropseed	SPCR	1-5			1-5	1-2	
Western wheatgrass	AGSM	1-5			-	1-2	
other perennial forbs	PPFF	-			1-2	-	
Buckwheat	ERIOG	-			-	1-2	
Globemallow	SPHAE	1-2			1-2	1-2	
milkvetch	ASTRA	1-2			-	-	
penstemon	PENST	1-2			1-2	1-2	
phlox	PHLOX	1-2			-	1-2	
Princes plume	STANL	1-2			1-2	-	
native annuals	AAFF	1-2			1-2	1-2	
SPINY hopsage	GRSP	-			1-5	1-2	
Green rabbitbrush	CHRTS9	-			5-10	-	
Small rabbitbrush	CHUIS	2-5			-	1-2	
Basin big sage	ARTRT	1-2			1-5	-	
Wyoming big Sage	ARTRW	1-2			1-5	1-2	
black sage brush	ARARN	20-30			-	1-2	
bud sagebrush	ARSPS	-			-	5-10	
Cacti		1-2			1-2	1-2	
ephedra	EPHED	1-2			2-5	1-2	
four wing saltbush	ATCA2	1-2			2-5	2-5	
Winterfat	EULAS	5-10			-	25-40	
RANGE SITE NAME OR NUMBER		NV-028-11			Loamy 8-10" P.Z.	NV-028-13	
POTENTIAL PRODUCTION LBS. AC. DRY WT. FAVORABLE YEARS		775			700	500	
POTENTIAL PRODUCTION LBS. AC. DRY WT. NORMAL YEARS		450			400	300	
POTENTIAL PRODUCTION LBS. AC. DRY WT. UNFAVORABLE YEARS		225			300	150	

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2: *Plants not included are Shadscale for D28-13, Shadscale and little leaf horsebrush for D28-8, and desert peach for D28-9.

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY 124

USDA-BDB

Rev 10/5/79 DAK

SOIL SURVEY AREA: Nye Co. Sevenmile Wash MLRA: 28 DATE: 8/15/79 BY: [illegible]
Revised: 1/30/80 PMS, DMS

SOIL MAP UNIT SYMBOL AND NAME: Umil - Applebush Association (124)

1.00 SETTING Gently sloping ridgetops gently many troughed U shaped drainages. AART 50°F RAP 8" PTS 75 days, Elv. 6900-7200' Most of the ppt falls in winter + spring. Summers are warm + dry; vegetation says a sparse ET

2.00 MAP UNIT COMPOSITION

MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	X IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10 Umil loam, 2 to 4 percent slopes - loamy, mixed, frigid, shallow Xerollic Durorthids	75	Broad terrace tops and side slopes, gently sloping top and gently sloping side slopes, old alluvium; 2-4% slopes	Black sagebrush, little rabbitbrush scattered Pinyon - Juniper
2.20 Applebush sandy loam, 2 to 4 percent slopes - coarse-loamy, mixed, frigid Xerollic Camborthids	15	Flat bottom drainages with stabilized alluvium gently sloping; 2-4% slope	Wyoming big sagebrush, mustard, needleand thread, Indian ricegrass
2.30			

CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	X IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40 Coarse loamy and sandy, mixed (calcareous), frigid Xeric Torriorthents, 2 to 4 percent slopes	4	2	5	2-4% slopes, narrow drainages	Sandy control section, lacks cambic horizons, lacks duripan, deep
2.60 Fishlake sandy loam, 2 to 4 percent slopes - loamy, mixed, frigid, shallow Xerollic Durargids	5	1	3	2-4% slopes, terrace tops	has argillic B horizon
2.60 Xerollic Durorthids, loamy, mixed, frigid, shallow, 0 to 2 percent slopes, moist	1	2	20	low terraces and benches receiving extra runoff waters.	Higher water supplying capacity than typical for Umil soils, big sagebrush vegetation

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Umil loam, 2 to 4 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-3	L	0	0	ML	A-4	2, M, PL	SH	FR	7.9 - 9.0		
3-6	L	0	15	CL-ML; ML	A-4	1, F, CR	SH	FR	7.9 - 9.0		
6-13	GR-L	20	10	CL-ML; ML	A-4	M	SH	FR	7.9-9.0		
13+	IND					M	EH	EFI			

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-3	0.6 - 2.0	.16 - .18		LOW	.43	1	D	NONE	—	—	> 5.0	—	—
3-6	0.6 - 2.0	.14 - .16		LOW									
6-13	0.6 - 2.0	.13 - .15		LOW									
13+													

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK CEMENTED PAN THICKNESS	CEMENTED PAN OR BEDROCK BEDROCK HARDNESS
4L	LOW - MOD.	MODERATE	HIGH	LOW	MODERATE	10-14	THICK	—

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10: Loamy, mixed, frigid, shallow Xerollic Durargids (2-4% slopes); Umil gravelly sandy loam, 4-15% slopes

3.20 MAJOR COMPONENT NAME: Applebush sandy loam, 2 to 4 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-33	SL	0	10-15	SM-SC, SM	A-2-4	1, M, SBK; 1, C, PL	SH	VFR	6.6 - 7.3		
33-36	VFSL	0	5	ML, SM	A-4	M	SH	VFR	7.9 - 8.4		
36-48	CBV-LS	30	40	SM	A-1-b		LO	LO	7.4 - 7.8		
48-60	GRV-S	0	55	GP.	A-1-a, A-1-b	SG.	LO	LO	7.4 - 7.8		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-33	2.0 - 6.0	.09 - .11		LOW	.20	5	B	RARE	V. BRIEF	MAR - MAY	> 5.0	—	—
33-36	0.6 - 2.0	.15 - .16		LOW									
36-48	6.0 - 20	.04 - .05		LOW									
48-60	6.0 - 20	.03		LOW									

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK CEMENTED PAN THICKNESS	CEMENTED PAN OR BEDROCK BEDROCK HARDNESS
3	LOW-MODERATE	HIGH	LOW	LOW	MODERATE	—	—	—

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20:

3.30 MAJOR COMPONENT NAME:

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
		0											

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK CEMENTED PAN THICKNESS	CEMENTED PAN OR BEDROCK BEDROCK HARDNESS

3.31 NONCONTRASTING INCLUDED SOILS WITH 3.30: Footnotes

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.)
W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE

G	Gravel
SG	sandy gravel
S	Sand
COS	Coarse sand
FS	Fine sand
VFS	Very fine sand
LCOS	Loamy coarse sand
LS	Loamy sand
LFS	Loamy fine sand
LVFS	Loamy very fine sand
COSL	Coarse sandy loam
SL	Sandy loam
FSL	Fine sandy loam
VFSL	Very fine sandy loam
SIC	Silty Clay
C	Clay
SICL	Silty clay loam
CL	Clay loam
L	Loam
SIL	Silt loam
SCL	Sandy clay loam
UNB	Unweathered bedrock
WB	Weathered bedrock

HORIZON TEXTURE MODIFIERS

CB	Cobbly
CBA	Angular Cobbly
CBV	Very cobbly
FL	Flaggy
GR	Gravelly
GRC	Coarse Gravelly
GRF	Fine gravelly
GRV	Very gravelly
SR	Stratified
ST	Stony
STV	Very stony
STX	Extremely stony

STRUCTURE

SG	Single grain
1	Weak
2	Moderate
3	Strong
VF	Very fine
F	Fine
M	Medium
C	Coarse
VC	Very coarse
GR	Granular
CR	Crumb
PL	Platy
PR	Prismatic
ABK	Angular blocky
SBK	Subangular blocky
M	Massive

CONSISTENCE

Dry:

LO	Loose
SO	Soft
SH	Slightly hard
H	Hard
VH	Very hard
EH	Extremely hard

Moist:

LO	Loose
VFR	Very friable
FR	Friable
FI	Firm
VFI	Very firm
EFI	Extremely firm

A-4

451

SOIL MAP UNIT INTERPRETATION - ORDER - 3

USDA-SCS

SOIL MAP UNIT SYMBOL AND NAME: Umil [illegible] - Applebush Association (124)

PRESENT MAJOR LAND USES: Range

POTENTIAL FORESEEABLE USES: See below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR. / NIRR.	7S	6C		6S	7S	
SUITABILITY FOR RANGE SEEDING	VERY POOR - ROOT ZONE AVAIL WATER CAPACITY	POOR - PRECIPITATION			VERY POOR - ROOT ZONE	
Shallow Excavations	SEVERE - CEMENTED PAN	SEVERE - CUTBANKS CAVE			SEVERE - CEMENTED PAN	
Local Streets & Roads	SEVERE - CEMENTED PAN	MODERATE - FROST ACTION			SEVERE - CEMENTED PAN, LOW STRENGTH	
Roadfill	POOR - THIN LAYER	GOOD			POOR - THIN LAYER, LOW STRENGTH	
Sand Source	IMPROBABLE - EXCESS FINES, THIN LAYER	PROBABLE			IMPROBABLE - EXCESS FINES, THIN LAYER	
Gravel Source	IMPROBABLE - EXCESS FINES, THIN LAYER	PROBABLE			IMPROBABLE - EXCESS FINES, THIN LAYER	
Pond Reservoir Areas	SEVERE (CEMENTED PAN	SEVERE - SEEPAGE			SEVERE - CEMENTED PAN	
Embankments, Dikes, Leeves	SEVERE - THIN LAYER, PIPING	MODERATE - PIPING, SEEPAGE			SEVERE - THIN LAYER PIPING	

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX	SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE WILD HERB	SHRUBS
2.10 Umil -		NONE		Poor	Poor
2.20 Applebush		NONE		Good	Good
2.30					
2.40 Coarse loamy and Sandy, mixed, frigid Xeric Torriorthents		NONE		Var	Var
2.50 Fishlake		NONE		Poor	Poor
2.60					

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS 2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
basin wildrye	ELCI2	2-5	—		5-15	2-5	
blue bunch wheatgrass	AGSP	5-10	5-12		1-5	5-10	3
blue grama	BOGR2	1-5	1-5		1-5	1-5	
bottle brush squirreltail	SIHY	1-5	1-5		1-5	1-5	3
galleta	HIJA	1-5	1-5		—	1-5	2
Indian rice grass	ORHY	5-10	5-10		1-5	5-10	12
needle and thread	STCO4	2-5	5-10		2-5	2-5	7
Sand dropseed	SPCR	1-5	1-5		1-5	1-5	
Sandberg blue grass	POSE	1-5	—		1-5	1-5	2
Thickspike wheatgrass	AGDA	0	1-5		—	—	
western wheatgrass	AGSM	1-5	—		—	1-5	
Pine bluegrass	POSC	—	—		—	—	7
Thurber needlegrass	STTHV	—	—		[illegible]	[illegible]	4
Forbs		—	—		[illegible]	[illegible]	15
penstemon	PENST	1-2	1-2		1-2	1-2	
phlox	PHLOX	1-2	1-2		—	20-30	
prince's plum	STAN6	1-2	1-2		—	?	
Black sagebrush	ARARN	20-30	1-2		1-5	1-2	
Wyoming big sagebrush	ARTRW	1-2	15-25		2-5	1-2	25
Winterfat	EULA5	5-10	1-2		2-5	1-2	2
bud sagebrush	ARSPS	?	1-2		—	1-2	
Small rabbitbrush	CHVI5	2-5	1-2		5-7	1-2	
Four wing saltbush	ATCA2	1-2	5-10		—	2-5	8
ephedra	EPHED	1-2	2-5		1-5	—	2
Spiny hopsage	GRSP	—	2-5		—	1-2	4
Douglas rabbitbrush	CHVI8	—	—		—	—	2
Littleleaf horsebrush	TEGL	1-4	1-4		5-10	—	
rubber rabbitbrush	CHNA2	0	1-2		5-7	—	
cacti		1-2	1-2		—	[illegible]	
Spineless horsebrush	TECA2	—	—		—	[illegible]	2
RANGE SITE NAME OR NUMBER		NV-028-11	Loamy 8-10" p.z.		Loamy 8-10"	NV-028-11	Loamy 8-10"
POTENTIAL PRODUCTION LBS. AC. ORY WT. FAVORABLE YEARS		775	700		700	775	900
POTENTIAL PRODUCTION LBS. AC. ORY WT. NORMAL YEARS		450	500		400	450	
POTENTIAL PRODUCTION LBS. AC. ORY WT. UNFAVORABLE YEARS		225	250		300	225	400

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2:

125

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY

USDA-BDE

SOIL SURVEY AREA: Nye Co. - Sevenmile Wash MLRA: 28 DATE: 8/16/79 BY: [illegible]
Revised: 1/30/80 PLS pms

SOIL MAP UNIT SYMBOL AND NAME: 123-Umil - Vinini - Buster Association

1.00 SETTING Gently Undulating Terraces with numerous drainage channels. drainage sideslopes are steep. change
APP 8", MAAT-50°, FFS 75 days Elv 7000-7200, Most of the ppt falls in the winter & spring, summer are dry, vegetation is sparse shrubs

2.00 MAP UNIT COMPOSITION

MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10 Umil loam, 2 to 4 percent slopes - loamy, mixed, frigid, shallow Xerollic Durorthids	55	Gently Undulating Terraces; 2-4 % slopes; alluvium	Black sagebrush, Indian ricegrass
2.20 Vinini gravelly loam, 8 to 15 percent slopes - Loamy-skeletal, mixed, frigid, shallow Haploxerollic Duragids	25	Moderately steep sideslopes of drainage channels dissecting the terraces; 8-15 % slopes; alluvium	Black sagebrush, Indian ricegrass
2.30 Buster sandy loam, 0 to 2 percent slopes - Fine-loamy, mixed, frigid Duri xerollic Haplargids	15	Nearly level, drainage bottoms with old alluvium; 0-2 % slopes; alluvium	Wyoming big sagebrush

CONTRASTIND INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIODRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTIND CHARACTERISTICS
2.40 Cedise loamy, mixed (calcareous) frigid Xeric Torriorthents	3			nearly linear or linear drainageways; 2-4 % slopes	lacks duripan and argillic horizon and is deep
2.50 Using gravelly loam, 15 to 30 percent slopes Sandy-skeletal, mixed frigid, Xeric Torriorthents	2			nearly linear sideslopes of drainageways; 15-30 % slopes	Sandy-skeletal, lacks duripan and argillic horizon, deep
2.60					

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Umil loam, 2 to 4 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-3	L	0	0	ML	A-4	2,M,PL	SH	FR	7.9-9.0		
3-6	L	0	15	CL-ML, ML	A-4	1,F,CR	SH	FR	7.9-9.0		
6-13	GR-L	20	10	CL-ML, ML	A-4	M	SH	FR	7.9-9.0		
13+	IND					M	EH	EFI			

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-3	0.6-2.0	.16-.18		LOW	.43	1	D	NONE	—	—	>5.0	—	—
3-6	0.6-2.0	.14-.16		LOW									
6-13	0.6-2.0	.13-.15		LOW									
13+													

EROSION HAZARD WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
4L	LOW-MOD	MODERATE	HIGH	LOW	MODERATE	10-14	THICK	—

3.11 NONCONTRASTIND INCLUDED SOILS WITH 3.10:

3.20 MAJOR COMPONENT NAME: Vinini gravelly loam, 8 to 15 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-4	GR-L	0	15	CL-ML, ML, SM-SC	A-4	2,M,PL	SO	VFR	7.4-7.8	<2	
4-20	GRV-CL	15-20	50-60	GC	A-6, A-2-6	1,C,PR & 1,F,SBK	LO	LO	7.4-7.8	<2	
20+	IND										

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-4	0.6-2.0	.13-.15		MODERATE	.32	1	D	NONE	—	—	>5.0	—	—
4-20	0.2-0.6	.10-.12		MODERATE									
20+													

EROSION HAZARD WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
6	MODERATE-HIGH	MODERATE	MODERATE	LOW	MODERATE	10-20	THICK	—

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20: Loamy, mixed, frigid, shallow Xerollic Duragids

3.30 MAJOR COMPONENT NAME: Buster sandy loam, 0 to 2 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-5	SL	0	0	SM-SC, SM	A-4 A-2-4	1,M,PL	SO	VFR	6.6-7.3		
5-14	L	0	0	CL-ML, ML	A-4	2,M,SBK	SH	FR	7.4-7.8		
14-20	GR-L	10	40	GM-GC	A-4	1,M,SBK	SH	FR	7.4-7.8		
20-60	GR-SL	0	30	SM-SC, SM	A-2-4	M	SO	VFR	7.9-8.4		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-5	2.0-6.0	.11-.13		LOW	.24	5	B	RARE	V. BRIEF	MAR-MAY	>5.0	—	—
5-14	0.6-2.0	.16-.18		LOW									
14-20	0.6-2.0	.11-.13		MODERATE									
20-60	2.0-6.0	.07-.09		LOW									

EROSION HAZARD WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
3	LOW	HIGH	LOW	LOW	MODERATE	7-60		

3.31 NONCONTRASTING INCLUDED SOILS WITH 3.30: Fine-loamy, mixed, frigid Xerollic Haplargids

Footnotes:

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.)
W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE

G	Gravel
SG	Sandy gravel
S	Sand
COS	Coarse sand
FS	Fine sand
VFS	Very fine sand
LCOS	Loamy coarse sand
LS	Loamy sand
LFS	Loamy fine sand
LVFS	Loamy very fine sand
COSL	Coarse sandy loam
SL	Sandy loam
FSL	Fine Sandy Loam
VFSL	Very fine sandy loam
SIC	Silty clay
C	Clay
SICL	Silty clay loam
CL	Clay loam
L	Loam
SIL	Silt loam
SCL	Sandy clay loam
UWB	Unweathered bedrock
WB	Weathered bedrock

HORIZON TEXTURE MODIFIERS

CB	Cobbly
CBA	Angular Cobbly
CBV	Very cobbly
FL	Flaggy
GR	Gravelly
GRC	Coarse gravelly
GRF	Fine gravelly
GRV	Very gravelly
ST	Stony
STV	Very stony
STX	Extremely stony

STRUCTURE

SG	Single grain
1	Weak
2	Moderate
3	Strong
VF	Very fine
F	Fine
M	Medium
C	Coarse
VC	Very coarse
GR	Granular
CR	Crumb
PL	Platy
PR	Prismatic
ABK	Angular blocky
SBK	Subangular blocky
M	Massive

CONSISTENCE

Dry:

LO	Loose
SO	Soft
SH	Slightly hard
H	Hard
VH	Very hard
EH	Extremely hard

Moist:

LO	Loose
VFR	Very friable
FR	Friable
FI	Firm
VFI	Very firm
EFI	Extremely firm

29

SOIL MAP UNIT INTERPRETATION - ORDER - 3

USDA-SCS

SOIL MAP UNIT SYMBOL AND NAME: Umil [illegible] - Vinmi [illegible] - Buster Association (125)

PRESENT MAJOR LAND USES: Range

POTENTIAL FORESEEABLE USES: See below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR.			4C	3C	7S	
NIRR.	7S	6S				
SUITABILITY FOR RANGE SEEDING	VLRY POOR - ROOT ZONE AVAIL. WAT. CAP	VERY POOR - ROOT ZONE AVAIL. WATER CAP.	POOR - PRECIPITATION	POOR - PRECIPITATION	VERY POOR - DEPTH TO SAND + GRAVEL, AWC	
Shallow Excavations	SEVERE - CEMENTED PAN	SEVERE - CEMENTED PAN	SLIGHT	SLIGHT	SEVERE - CUTBANKS CAVE	
					15-30%: SEV.-SLOPE, C.C.	
Local Roads + Streets	SEVERE - CEMENTED PAN	SEVERE - LOW STRENGTH	MODERATE - FROST ACTION, FLOODS	MODERATE - FLOODS	15-30%: SEVERE - SLOPE	
				LOW STRENGTH, FROST ACTION		
Roadfill	POOR - THIN LAYER	POOR - LOW STRENGTH, THIN LAYER	GOOD	FAIR - LOW STRENGTH	25-30%: SEVERE - SLOPE	
Sand Source	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES	PROBABLE	
Gravel Source	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES	PROBABLE	
Pond Reservoir Areas	SEVERE - CEMENTED PAN	8-15%: SEVERE - SLOPE CEMENTED PAN	SEVERE - SEEPAGE	3-4%: MODERATE - SLOPE	SEVERE - SEEPAGE	
					15-30%: SEV. - SLOPE, SEEP.	
Embankments, Dikes, Leeves	SEVERE - THIN LAYER, PIPING	SEVERE - THIN LAYER	MODERATE - SEEPAGE	SEVERE - PIPING	SEVERE - SEEPAGE	

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY			SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE				
	ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX	GRAIN & SEED	GRASS & EGUME	WILD HERB		SHRUBS
2.10 Umil [illegible]		NONE				Poor		Poor
2.20 Vinmi [illegible]		NONE				Fair		Fair
2.30 Buster		NONE		Poor	Poor	Good		Good
2.40 Xeric Torriorthents, coarse-loamy mixed (calcareous), frigid 2 TO 4 percent slopes.		NONE		FAIR	FAIR	FAIR		FAIR
2.50 Usine [illegible]		NONE				POOR		POOR
2.60								

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS					
		2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
basin wildrye	ELCI2	2-5	1-5	-	-	1-5	
blue bunch wheatgrass	AGSP	5-10	5-10	5-12	5-12	5-10	
blue grama	BOGR2	1-5	1-5	1-5	1-5	-	
bottle brush squirreltail	SIHY	1-5	1-5	1-5	1-5	-	
galleta	HIJA	1-5	1-5	1-5	1-5	-	
Indian rice grass	ORHY	5-10	5-10	5-10	5-10	5-10	
needle and thread	STCO4	0-5	5-10	5-10	5-10	5-10	
sand dropseed	SPCR	1-5	-	-	1-5	1-5	
Sandberg bluegrass	POSE	1-5	1-5	-	-	1-5	
Thickspike wheatgrass	AGDA	-	-	1-5	1-5	-	
western wheatgrass	AGSM	1-5	-	-	-	-	
buckwheat	ERIOG	-	1-2	1-2	1-2	1-2	
globemallow	SPHAE	1-2	1-2	1-2	1-2	1-2	
penstemon	PENST	1-2	1-2	1-2	-	1-2	
princes plume	STANL	1-2	1-2	1-2	1-2	1-2	
black sagebrush	ARNO	20-30	20-30	1-2	1-2	20-25	
bud sagebrush	ARSPS	?	5-10	1-2	1-2	2-5	
cacti		1-2	1-2	1-2	1-2	1-5	
ephedra	EPHED	1-2	1-2	0-5	2-5	1-5	
Fourwing saltbush	ATCA2	-	2-5	5-10	5-10	2-5	
Littleleaf horsebrush	TEGL	1-2	1-2	1-2	-	1-5	
Wyoming big sagebrush	ARTRW	1-2	1-2	15-25	15-25	-	
Small rabbitbrush	CHVIS	2-5	2-5	1-2	1-2	-	
Spiny hopsage	GRSP	-	1-2	2-5	2-5	-	
Shadscale	ATCO	1-2	1-2	-	-	-	
yucca	YUCCA	-	1-2	-	-	-	
Winterfat	EULAS	-	-	1-2	1-2	1-5	
Mountain big sagebrush	ARTRV	-	1-2	2-5	-	1-5	
Milkvetch	ASTRA	1-2	1-2	-	-	-	
phlox	PHLOX	1-2	1-2	1-2	1-2	1-2	
RANGE SITE NAME OR NUMBER		NV-D28-11	NV-D28-11	Loamy, P-10" p.z.	Loamy, P-10" p.z.	NV-D28-16	
POTENTIAL PRODUCTION LBS. AC. DRY WT. FAVORABLE YEARS		775	650	700	700	-	
NORMAL YEARS		450	350	500	500	270	
UNFAVORABLE YEARS		225	175	250	250	175	

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2: Include cl. rose, glossopetalon in NV-D28-16

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY 127

USDA-SCS

SOIL SURVEY AREA: Nye Co - Sevenmile wash, Monitor Valley MLRA: 28 DATE: 7/19/77 BY: EM
SOIL MAP UNIT SYMBOL AND NAME: 127 Umil - Buster - Muni Association
1.00 SETTING Old dissected terraces and strongly sloping to moderately sloping sideslopes Rev'd: 11/31/00 RES/MTS
PZP 8", AMAT 50°F, FFS 75 days, Elev. 7000' Most of the precipitation falls in the winter or spring
summers are warm and dry, vegetation is mostly Black sagebrush

2.00 MAP UNIT COMPOSITION

	MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10	Umil loam, 2 to 30 percent slopes - Loamy, mixed, frigid, shallow Xerollic Durorthids	60	Terrace side slopes, 2 to 30% slopes. Formed in old alluvium;	Black sagebrush, scattered Pinyon-Juniper, Sandberg bluegrass, squirreltail
2.20	Buster gravelly loam, 2 to 8 percent slopes, dry. - Fine-loamy, mixed, frigid Durixerollic Haplargids	20	Terrace benches, 2 to 8% slope; Formed in old alluvium;	Black sagebrush, Little rabbitbrush, scattered Pinyon-Juniper, spiny hopsage
2.30	Muni Sandy loam, 0 to 8 percent slopes moist - Loamy, mixed, frigid, shallow Haploxerollic Duramids	15	Gently sloping or rounded terrace tops; 0 to 8% slopes Formed in old alluvium;	Big sagebrush, squirreltail, scattered Juniper, Some black greasewood

	CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40	Coarse-loamy, mixed, frigid Aridic Pachic Haploxerolls	3	2	10	Wash bottoms, 2-4%	Mollic epipedon, calcic horizon
2.50	Coarse-loamy, mixed (calcareous), frigid Xeric Torriorthents	2	2	5	Short steep sideslopes, 15-30%	Steep sideslopes, lacks duripan, and argillic and cambic horizon
2.60						

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Umil loam, 2 to 30 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-3	L	0	0	ML	A-4	2,M,PL	SH	FR	7.9-9.0		
3-6	L	0	15	CL-ML,ML	A-4	1,F,CR	SH	FR	7.9-9.0		
6-13	GR-L	20	10	CL-ML,ML	A-4	M	SH	FR	7.9-9.0		
13+	IND					M	EH	EFI			

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-3	0.6-2.0	.16-.18		LOW	.43	1	D	NONE	—	—	75.0	—	—
3-6	0.6-2.0	.14-.16		LOW									
6-13	0.6-2.0	.13-.15		LOW									
13+													

EROSION HAZARD WIND	EROSION HAZARD WATER	CORROSIVITY WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
EROD. GRP. 4L	MOD-HIGH	MODERATE	HIGH	LOW	MODERATE	10-14	THICK	—

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10:

3.20 MAJOR COMPONENT NAME: Buster gravelly loam, 2 to 8 percent slopes, dry

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-5	GR-L	0	30	SM-SC,SM	A-4, A-2-4	1,M,PL	SO	VFR	6.6-7.3		
5-14	L	0	0	CL-ML, ML	A-4	2,M,SBK	SH	FR	7.4-7.8		
14-20	GR-L	10	40	GM-GC	A-4	1,M,SBK	SH	FR	7.4-7.8		
20-60	GR-SL	0	30	SM-SC,SM	A-2-4	M	SO	VFR	7.9-8.4		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-5	2.0-6.0	.11-.13		LOW	.20	5	B	NONE	—	—	>5.0	—	—
5-14	0.6-2.0	.16-.18		LOW									
14-20	0.6-2.0	.11-.13		MODERATE									
20-60	2.0-6.0	.07-.09		LOW									

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
3	LOW-MOD	HIGH	LOW	LOW	MODERATE	>60	—	—

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20:

3.30 MAJOR COMPONENT NAME: Muni Sandy loam, 0 to 8 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-6		0	0-10	SM-SC,SM	A-2-4, A-4	1,M,GR	SO	VFR	7.9-8.4		
6-12	SCL	0	0-10	SM-SC,SC	A-2-6, A-6	2,M,SBK	SH	FR	7.9-8.4		
12-34	IND										
34-60	GR-S,S	0	0-40	SM,SW-SM	A-1-b,A-3,A-2-4	SG		L	7.9-9.0		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-6	2.0-6.0	.10-.11		LOW	.32	1	D	NONE	—	—	>5.0	—	—
6-12	0.2-0.6	.17-.18		MODERATE									
12-34													
34-60	>2.0	.04-.06		LOW									

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
3	LOW-HIGH	HIGH	MODERATE	LOW	MODERATE	10-20	7	

3.31 NONCONTRASTING INCLUDED SOILS WITH 3.30:

Footnotes

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.)
W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE
G Gravel
SG Sandy gravel
S Sand
COS Coarse sand
FS Fine sand
VFS Very fine sand
LCOS Loamy coarse sand
LS Loamy sand
LFS Loamy fine sand
LVFS Loamy very fine sand
COSL Coarse sandy loam
SL Sandy loam
FSL Fine Sandy Loam
VFSL Very fine sandy loam
SIC Silty Clay
C Clay
SICL Silty clay loam
CL Clay loam
L Loam
SIL Silt loam
SCL Sandy clay loam
UWB Unweathered bedrock
WB Weathered bedrock

HORIZON TEXTURE MODIFIERS
CB Cobbly
CBA Angular Cobbly
CBV Very cobbly
FL Flaggy
GR Gravelly
GRC Coarse gravelly
GRF Fine gravelly
GRV Very gravelly
SR Stratified
ST Stony
STV Very stony
STX Extremely stony

STRUCTURE
SG Single grain
1 Weak
2 Moderate
3 Strong
VF Very fine
F Fine
M Medium
C Coarse
VC Very coarse
GR Granular
CR Crumb
PL Platy
PR Prismatic
ABK Angular blocky
SBK Subangular blocky
M Massive

CONSISTENCE
Dry:
LO Loose
SO Soft
SH Slightly hard
H Hard
VH Very hard
EH Extremely hard
Moist:
LO Loose
VFR Very friable
FR Friable
FI Firm
VFI Very firm
EFI Extremely firm

A-6

TSI

SOIL MAP UNIT INTERPRETATION - ORDER - 3

USDA-SCS

SOIL MAP UNIT SYMBOL AND NAME: 127 Unit 1, 2, 4 - Buster - Unit 3 Association

PRESENT MAJOR LAND USES: Range

POTENTIAL FORESEEABLE USES: See below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.80
CAPABILITY SUBCLASS- IRR.		4c		6c	6s	
NIRR.	7s		7s			
SUITABILITY FOR RANGE SEEDING	VERY POOR - ROOT ZONE	POOR - PRECIPITATION	VERY POOR - ROOT ZONE		POOR - PPT	
Shallow Excavations	SEVERE - CEMENTED PAN 15-30%: SEVERE - SLOPE, CEM. PAN	SLIGHT	SEVERE - CEMENTED PAN, CUTBANKS CAVE		15-30%: SEVERE - SLOPE	
Local Roads & Streets	SEVERE - CEMENTED PAN 15-30%: SEVERE - SLOPE, CEM. PAN	MODERATE - FROST ACTION, FLOODS	SEVERE - CEMENTED PAN,		15-30%: SEVERE - SLOPE	
Roadfill	POOR - THIN LAYER 25-30%: POOR - SLOPE, THIN LAYER	GOOD	POOR - THIN LAYER, AREA RECLAIM		25-30%: POOR - SLOPE	
Sand Source	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - THIN LAYER		IMPROBABLE - EXCESS FINES	
Gravel Source	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - THIN LAYER		IMPROBABLE - EXCESS FINES	
Pond Reservoir Area	SEVERE - CEMENTED PAN 8-30%: SEVERE - SLOPE, CEM. PAN	SEVERE - SEEPAGE	SEVERE - SEEPAGE, CEMENTED PAN		15-30%: SEVERE - SLOPE	
Embankments, Dikes, Leeves	SEVERE - THIN LAYER PIPING	MODERATE - SEEPAGE	SEVERE - SEEPAGE THIN LAYER		SEVERE - PIPING	

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	POTENTIAL PRODUCTIVITY SITE INDEX	SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE GRAIN & SEED	GRASS/LEGUME	WILD HERB		SHRUBS	
2.10 Unit 1		NONE				Poor		Poor	
2.20 Buster, dry		NONE		Poor	Fair	Good		Good	
2.30 Unit 3, moist		Junipers				Poor		Poor	
2.40 Coarse-loamy, mixed, frigid Aridic Pachic Haploxerolls		NONE				Var		Var	
2.60 Xeric Torriorthents coarse-loamy, mixed, frigid		Junipers				Fair		Fair	
2.60									

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS 2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.60 FROM PAGE 1	2.60 FROM PAGE 1
Basin wildrye	ELCI2	1-5	2-5	2-5	30-50	4	
blue bunch wheatgrass	AGSP	5-10	5-10	5-10	-	4	
blue grama	BOGR2	1-5	1-5	1-5	-		
bottle brush squirreltail	SIHY	1-5	1-5	1-5	1-5		
galleta	HIJA	1-5	1-5	1-5	-		
Indian rice grass	ORHY	5-10	5-10	5-10	1-5	10	
needle and thread	STCO4	5-10	2-5	2-5	1-5	8	
sand dropseed	SPCR	-	1-5	1-5	-		
sandberg bluegrass	POSE	1-5	1-5	1-5	-		
western wheatgrass	AGSM	-	1-5	1-5	2-		
other Grasses	PPGG	-	-	-	-	15	
forbs	PPFF	-	-	-	-		
prince plume	STNU2	1-2	1-2	1-2	-	2	
black sagebrush	ARARN	20-30	20-30	20-30	-		
bud sagebrush	ARSPS	5-10	?	?	-		
Cacti		1-2	1-2	1-2	-		
ephedra	EPHED	1-2	1-2	1-2	1-2	5	
fourwing saltbush	ATCA2	2-5	1-2	1-2	1-2	5	
little leaf horsebrush	TEGL	1-2	1-2	1-2	-		
Wyoming big sagebrush	ARTRW	1-2	1-2	1-2	-	20	
Small rabbit brush	CHVI5	2-5	2-5	2-5	-		
other Shrubs	SSSS	-	-	-	-	10	
shadscale	ATCO	1-2	1-2	1-2	-		
basin big sagebrush	ARTR2	-	-	-	5-10		
Sedges	CAREX	-	-	-	1-5		
Slender wheatgrass	AGTR	-	-	-	2-5		
baltic rush	JUBA	-	-	-	2-5		
Nevada bluegrass	PONE	-	-	-	2-5		
willow	SALIX	-	-	-	1-2		
Winter fat	EULA5	-	5-10	5-10	-		
RANGE SITE NAME OR NUMBER		NV-D28-11	NV-D28-11	Juniper Savanna, 11-16"	NV-D28-3	NV-D28-12	
POTENTIAL PRODUCTION LBS. AC. DRY WT. FAVORABLE YEARS		650	775	775	2600	550	
NORMAL YEARS		350	450	450	1250	300	
UNFAVORABLE YEARS		175	225	225	800	175	

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2: Include Thickspike wheatgrass, mat muhly, balsam root and others for NV-D28-3; include mountain big sage, yucca for NV-D28-11; include rabbit brush, horsebrush and others for NV-D28-10.

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY 131

USDA-BOS

SOIL SURVEY AREA: NYE CO Sevenmile Wash MLRA: 28 DATE: 10/9/79 BY: aak
Revised 1/1900 PLS, pms

SOIL MAP UNIT SYMBOL AND NAME: 131 Sevenmile-Applebush Association

1.00 SETTING Broad recent alluvial bottoms, 500 to 3000' wide with many shallow channels with frequent overflow.
Elev. 7000', AAP-8", MAAT 50°F, FFS-75 days, Moisture Reg.-Aridic; most ppt. falls in winter & spring

2.00 MAP UNIT COMPOSITION

	MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10	Sevenmile silt loam, 0 to 2 percent slopes - Coarse-loamy, mixed, frigid Torrifluventic Haploxerolls	85	Recent alluvial bottoms with many shallow channels mixed material, nearly level, frequently flooded 0-2% slopes	Basin big sagebrush, basin wildrye, Indian ricegrass, squirreltail, Torbers needlegrass
2.20	Applebush sandy loam, 2 to 4 percent slopes - Coarse-loamy, mixed, frigid Xerollic Camborthids	15	Recent alluvium, small enchroaching side fans from small drainages, 0 & 4% slopes. Rodfbdy	Wyoming big sagebrush, squirreltail, Indian ricegrass.
2.30				

	CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40						
2.50						
2.60						

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Sevenmile silt loam, 0 to 2 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-20	SIL	0	0	ML	A-4	1,C,PL & 2,M,SBK	SH	FR	7.4-8.4		
20-60	SR-SL-SIL	0	0	SM	A-4	M	SH	FR	7.4-8.4		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-20	0.6-2.0	.19-.21		LOW	.43	1	B	FREQUENT	V. BRIEF	MAR-MAY	>5.0	—	—
20-60	0.6-6.0	.11-.21		LOW									

	EROSION HAZARD WIND	EROSION HAZARD WATER	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
EROD. GRP.	5	LOW	HIGH	LOW	MODERATE	—	—	

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10: Coarse-silty, mixed, frigid Torrifluventic Haploxeroll; Coarse-loamy, mixed frigid Cumulic Haploxeroll; Coarse-loamy, mixed frigid, Typic Torrifluvents

3.20 MAJOR COMPONENT NAME: Applebush sandy loam, 0 to 4 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-33	SL	0	10-15	SM-SC, SM	A-2-4	1,M,SBK & 1,C,PL	SH	VFR	6.6-7.3		
33-36	VFSL	0	5	ML, SM	A-4	M	SH	VFR	7.9-8.4		
36-48	CBV-LS	30	40	SM	A-1-b	M	LO	LO	7.4-7.8		
48-60	GRV-S	0	55	GP	A-1-a, A-1-b	SG	LO	LO	7.4-7.8		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-33	2.0-6.0	.09-.11		LOW	.20	5	B	RARE	—	—	>5.0	—	—
33-36	0.6-2.0	.15-.16		LOW									
36-48	6.0-20	.04-.05		LOW									
48-60	6.0-20	.03		LOW									

	EROSION HAZARD WIND	EROSION HAZARD WATER	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARONESS
EROD. GRP.	3	LOW-MOD.	HIGH	LOW	LOW	MODERATE	—	—	—

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20: Fluventic Camborthids, coarse-loamy, mixed, frigid.

3.30 MAJOR COMPONENT NAME:

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS

	EROSION HAZARD WIND	EROSION HAZARD WATER	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
EROD. GRP.								

3.31 NONCONTRASTING INCLUDED SOILS WITH 3.30:

Footnotes

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.)
W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE

C	Gravel
SG	Sandy gravel
S	Sand
COS	Coarse sand
FS	Fine sand
VFS	Very fine sand
LCOS	Loamy coarse sand
LS	Loamy sand
LFS	Loamy fine sand
LVFS	Loamy very fine sand
COSL	Coarse sandy loam
LS	Sandy loam
FSL	Fine Sandy Loam
VFSL	Very fine sandy loam
SIC	Silty Clay
C	Clay
SICL	Silty clay loam
CL	Clay loam
L	Loam
SIL	Silt loam
SCL	Sandy clay loam
UWB	Unweathered bedrock
WB	Weathered bedrock

HORIZON TEXTURE MODIFIERS

CB	Cobbly
CBA	Angular Cobbly
CBV	Very cobbly
FL	Flaggy
GR	Gravelly
GRC	Coarse gravelly
GRF	Fine gravelly
GRV	Very gravelly
SR	Stratified
ST	Stony
STV	Very stony
STE	Extremely stony

STRUCTURE

SG	Single grain
1	Weak
2	Moderate
3	Strong
VF	Very fine
F	Fine
M	Medium
C	Coarse
VC	Very coarse
GR	Granular
CR	Crumb
PL	Platy
PR	Prismatic
ABK	Angular blocky
SBK	Subangular blocky
M	Massive

CONSISTENCE

Dry:

LO	Loose
SO	Soft
SH	Slightly hard
H	Hard
VH	Very hard
EH	Extremely hard

Moist:

LO	Loose
VFR	Very friable
FR	Friable
FI	Firm
VFI	Very firm
EFI	Extremely firm

A-7

(13)

SOIL MAP UNIT INTERPRETATION - ORDER - 3

USDA-SCS

SOIL MAP UNIT SYMBOL AND NAME: 131. Sevenmile - Applebush Association

PRESENT MAJOR LAND USES: Range

POTENTIAL FORESEEABLE USES: See below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR.	4e	6c				
NIRR.						
SUITABILITY FOR RANGE SEEDING	FAIR(1)-PRECIPITATION	POOR - PRECIPITATION				
Shallow excavations	MODERATE - FLOODS	SEVERE - CUTBANKS CAVE				
local streets and roads; road fill	SEVERE - FLOODS	MODERATE - FROST ACTION				
	FAIR - LOW STRENGTH THIN LAYER	GOOD				
Sand Source	IMPROBABLE - EXCESS FINES	PROBABLE				
Gravel Source	IMPROBABLE - EXCESS FINES	PROBABLE				
Pond Reservoir Area	SEVERE - SEEPAGE	SEVERE - SEEPAGE				
Embankments, Dikes, Leeves	SEVERE - PIPING	MODERATE - PIPING, SEEPAGE				

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY			SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE					
	ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX	Grain & seed	Grass & Legume	Wild Herb		Shrubs	
2.10 Sevenmile 0-7		NONE		Poor	Poor	Good		Good	
2.20 Applebush 4		NONE				Good		Good	
2.30									
2.40									
2.50									
2.60									

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME *	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS					
		2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
basin wildrye	ELCI2	30-50	0				
baltic rush	JUBA	1-5	0				
alkali sacaton	SPAI	1-5	0				
bottle brush squirreltail	SIHY	1-5	1-5				
blue grama	BOGR2	0	1-5				
blue bunch wheatgrass	AGSP	0	5-12				
galleta	HIJA	0	1-5				
Indian ricegrass	ORHY	1-5	5-10				
needle and thread	STCO4	1-5	5-10				
nuttall alkaligrass	PUAI	1-5	0				
mat muhly	MURI	1-5	0				
Nevada bluegrass	PONE	2-5	0				
Sedges	CAREX	1-5	0				
Sand dropseed	SPCO	0	1-5				
Thickspike wheatgrass	AGDA	2-5	1-5				
Slender wheatgrass	AGTR	2-5	0				
Western wheatgrass	AGSM	2-5	0				
Balsam root	BASA3	1-2	0				
Buckwheat	ERIOG	0	1-2				
Globe mallow	SPHAE	0	1-2				
Hawksbeard	CREPI	1-2	0				
native annuals	AAFF	0	1-2				
basin big sagebrush	ARTR2	5-10	0				
Wyoming big sagebrush	ARTW	0	15-25				
Rubber rabbitbrush	CHNA	1-2	1-2				
bud sagebrush	ARSPS	0	1-2				
four wing saltbush	ATCA2	1-2	5-10				
ephedra	EPHED	1-2	0-5				
spiny hopsage	GRSP	0	2-5				
Willow	SALIX	1-2	0				
RANGE SITE NAME OR NUMBER		NV-D28-3	Loamy, 8-10" p.z.				
POTENTIAL PRODUCTION LBS. AC. DRY WT. - FAVORABLE YEARS		2,600	900				
NORMAL YEARS		1,250	500				
UNFAVORABLE YEARS		600	250				

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2:

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY

132

USDA-SCS

SOIL SURVEY AREA: Nye Co., Nev. - Sevenmile Wash MLRA: 28 DATE: BY:

SOIL MAP UNIT SYMBOL AND NAME: 132 Sevenmile wet - Sevenmile association Revised: 1/30/86 DMS DLS

1.00 SETTING Alluvial bottomland, nearly level with deeply cut drainageways; AAP - 8", FFS 75, AAAT - 50°F., Elev. ~7000'; most ppt falls in winter + spring

2.00 MAP UNIT COMPOSITION

	MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE (1)
2.10	Sevenmile silt loam, 0 to 2 percent slopes, wet - Coarse-loamy, mixed, frigid Torrifluventic Haploxerolls	80	floodplain, recent alluvium, 0-2% slopes	rushes, alkali sacaton, inland saltgrass, basin big sagebrush
2.20	Sevenmile silt loam, 2 to 4 percent slopes - Coarse-loamy, mixed, frigid Torrifluventic Haploxerolls	19	floodplain, recent alluvium, 2-4% slopes	basin wildrye, western wheatgrass, basin big sagebrush
2.30				

	CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40	Sandy, mixed, frigid Xeric Torriorthents	1			floodplain - Riverwash area; 0-2%; sinuous, narrow areas	Sandy control section; not wet, lacks mollic epipedon
2.50						
2.60						

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Sevenmile, silt loam, 0 to 2 percent slopes, wet

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-20	SIL	0	0	ML	A-4	1,C,PL & 2,M,SBK	SH	FR	7.4-8.4		
20-60	SR-SL-SIL	0	0	SM	A-4	M	SH	FR	7.4-8.4		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE (2) DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-20	0.6-2.0	.19-.21		LOW	.43	1	B	FREQUENT	V. BRIEF	MAR.-MAY	1.0-3.0	APPARENT	AUG.-JUN.
20-60	0.6-6.0	.11-.21		LOW									

	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
WIND EROD. GRP. 8	LOW-MOD.	Slight	HIGH	LOW	HIGH	-	-	-

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10:

3.20 MAJOR COMPONENT NAME: Sevenmile silt loam, 2 to 4 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-20	SIL	0	0	ML	A-4	1,C,PL & 2,M,SBK	SH	FR	7.4-8.4		
20-60	SR-SL-SIL	0	0	SM	A-4	M	SH	FR	7.4-8.4		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-20	0.6-2.0	.19-.21		LOW	.43	1	B	FREQUENT	V. BRIEF	MAR.-MAY	>5.0	-	-
20-60	0.6-6.0	.11-.21		LOW									

	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
WIND EROD. GRP. 5	LOW-MOD.	MODERATE	LOW	LOW	MODERATE	-	-	-

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20:

3.30 MAJOR COMPONENT NAME:

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS

	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
WIND EROD. GRP.								

3.31 NONCONTRASTING INCLUDED SOILS WITH 3.30:

Footnotes:

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.) W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE

G	Gravel
SG	Sandy gravel
S	Sand
COS	Coarse sand
FS	Fine Sand
VFS	Very fine Sand
LCOS	Loamy coarse sand
LS	Loamy sand
LFS	Loamy fine sand
LVFS	Loamy very fine sand
COSL	Coarse sandy loam
SL	Sandy loam
FSL	Fine Sandy Loam
VFSL	Very fine sandy loam
SIC	Silty Clay
C	Clay
SICL	Silty clay loam
CL	Clay loam
L	Loam
SIL	Silt loam
SCL	Sandy clay loam
UWB	Unweathered bedrock
WB	Weathered bedrock

HORIZON TEXTURE MODIFIERS

CB	Cobbly
CBA	Angular Cobbly
CBV	Very cobbly
FL	Flaggy
GR	Gravelly
GRC	Coarse gravelly
GRF	Fine gravelly
GRV	Very gravelly
ST	Stratified
ST	Stony
STV	Very stony
STE	Extremely stony

STRUCTURE

SG	Single grain
1	Weak
2	Moderate
3	Strong
VF	Very fine
F	Fine
M	Medium
C	Coarse
VC	Very coarse
GR	Granular
CB	Crumb
PL	Platy
PR	Prismatic
ABK	Angular blocky
SBK	Subangular blocky
M	Massive

CONSISTENCE

Dry:

LO	Loose
SO	Soft
SH	Slightly hard
H	Hard
VH	Very hard
EH	Extremely hard

Moist:

LO	Loose
VFR	Very friable
FR	Friable
FI	Firm
VFI	Very firm
EFI	Extremely firm

132

USDA-SCS

SOIL MAP UNIT INTERPRETATION - ORDER - 3

SOIL MAP UNIT SYMBOL AND NAME: 132 - Sevenmile Association

PRESENT MAJOR LAND USES: Range

POTENTIAL FORESEEABLE USES: See below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR.		4e		6s		
NIRR.	6w					
SUITABILITY FOR RANGE SEEDING	GOOD (3)	FAIR (2) - PRECIPITATION				
Shallow Excavations	SEVERE - WETNESS	MODERATE - FLOODS				
local Roads + Streets	SEVERE - FLOODS	SEVERE - FLOODS				
Roadfill	FAIR - LOW STRENGTH, WETNESS	FAIR - LOW STRENGTH				
Sand Source	IMPROBABLE - EXCESS FINES	IMPROBABLE - EXCESS FINES				
Gravel Source	IMPROBABLE - EXCESS FINES	IMPROBABLE - EXCESS FINES				
Pond Reservoir Area	SEVERE - SEEPAGE	SEVERE - SEEPAGE				
Embankments, Dikes, Leeves	SEVERE - PIPING	SEVERE - PIPING				

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX	SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE Grain & Seed	Grass & Legume	Wild Herb		Shrubs	wetland plants	shallow water
2.10 Sevenmile, wet		NONE				Good		Good	Fair	Poor
2.20 Sevenmile		NONE		Poor	FAIR	Good		Good		
2.30						JAR		JAR		
2.40 Sandy, mixed frigid Xeric Torrs. Hants		NONE								
2.50										
2.60										

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS 2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
Alkali Sacaton	SPAI	10-15	1-5		5-10		
alkali cordgrass	SPGR	2-5	-		-		
basin wildrye	ELCI2	1-5	30-50		5-15		
blue grama	BOGR2	-	-		1-5		
baltic rush	JUBA	-	1-5		-		
bulrush	SCIRP	1-5	-		-		
rushes	JUNCA	20-30	1-5		-		
sedges	CAREX	5-10	1-5		-		
bottlebrush Squirreltail	SIHY	-	1-5		1-5		
Cattail	TYLA	1-5	-		-		
Indian ricegrass	ORHY	-	1-5		1-5		
giant needle grass	ACRD4	1-5	-		-		
inland salt grass	DIST	5-10	-		-		
needle and thread	STCO4	1-5	1-5		2-5		
Sandberg bluegrass	POSE	-	-		1-5		
slender wheatgrass	AGTR	-	2-5		-		
western wheatgrass	AGSM	1-5	2-5		-		
balsamroot	BASA3	-	1-2		-		
globemallow	SPHAE	-	-		1-2		
Basin big sagebrush	ARTRT	1-2	5-10		5-7		
Rubber rabbitbrush	CHNA2	1-2	1-2		-		
Fourwing saltbush	ATCA2	-	1-2		2-5		
ephedra	EPHED	-	1-2		2-5		
Rose	ROSA	1-2	1-2		-		
Willow	SALIX	1-2	1-2		-		
Green rabbitbrush	CHVI8	-	-		5-10		
SPINY hopsage	GRSP	-	-		1-5		
Cliffrose	COMES	-	-		1-5		
Silver buffaloberry	SHAR	1-2	-		-		
Douglas rabbitbrush	CHVI8	-	1-2		-		
RANGE SITE NAME OR NUMBER		NV-D28-1	NVD28-3		NV-D28-9		
POTENTIAL PRODUCTION LBS. AC. DRY WT. FAVORABLE YEARS		4,000	2,600		700		
NORMAL YEARS		2,000	1,250		400		
UNFAVORABLE YEARS		1,200	800		300		

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2: Include sand dropseed, blue grama, wheatgrass, Indian ricegrass, needle and thread, Sandberg bluegrass, slender wheatgrass, western wheatgrass, basin wildrye, globemallow, basin big sagebrush, rubber rabbitbrush, fourwing saltbush, ephedra, rose, willow, green rabbitbrush, spiny hopsage, cliffrose, silver buffaloberry, Douglas rabbitbrush, prince's plume, pincushion, desert peach, cacti and winterfat. For NV-D28-9, Include Nevada bluegrass, thickspike wheatgrass, Nuttall alkaligrass, mat muhly and Douglas rabbitbrush. For NV-D28-3

141

USDA-SCS

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY

Rev 10/7/99 ark

SOIL SURVEY AREA: NYE CO Sevenmile Wash MLRA: 28 DATE: 9/12/79 BY: ARK RPT

SOIL MAP UNIT SYMBOL AND NAME: 141 - Applebush sandy loam, 0-2 percent slopes, flooded Revised: 11/8/00 PMS RS

1.00 SETTING Alluvial bottom with incised meandering channel approx 100-800' wide, many side drainage adding to the alluvium. AAP- 8", AAAT 50°F, FFS 75 days, Elevation 6900±7100' most of the ppt falls in winter Landspacing, Summers are warm & dry, vegetation is sparse shrubs.

2.00 MAP UNIT COMPOSITION — MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10 Applebush, sandy loam, 0 to 2 percent slopes, flooded - Coarse-loamy, mixed, frigid Xerollic Camborthids	85	Formed in recent stabalized alluvium, with an incised meandering stream channel, 0-2% slopes	Basin big sagebrush, Rubber rabbitbrush, Indian ricegrass, Black greasewood
2.20			
2.30			

CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40 Coarse-loamy, mixed (calcareous), frigid Xeric Torriorthents, 0 to 2 percent slopes	9	.2	10	gently sloping, small fans from side drainages, 0-2% slopes	No Cambic horizon, Recent material
2.50 Sandy-skeletal, mixed, frigid Xeric Torriorthents, 0 to 2 percent slopes, flooded	6	0.5	3	Streamchannel, cut banks and small areas of deposition, 0-2% slopes	Sandy skeletal, no cambic horizon Occasional flooding
2.60					

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Applebush sandy loam, 0 to 2 percent slopes, flooded

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED (1)	AASHTO (1)	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-33	SL	0	10-15	SM-SC, SM	A-2-4	LM, SBK & 1, C, PL	SH	VFR	6.6-7.3		
33-36	VFSL	0	5	ML, SM	A-4	M	SH	VFR	7.9-8.4		
36-48	CBV-LS	30	40	SM	A-1-b	M	LO	LO	7.4-7.8		
48-60	GRV-S	0	55	GP	A-1-a, A-1-b	SG	LO	LO	7.4-7.8		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING (2) FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-33	2.0-6.0	.09-.11		LOW	.20	5	B	FREQUENT	V. BRIEF	MAR-MAY	—	—	—
33-36	0.6-2.0	.15-.16		LOW									
36-48	6.0-20	.04-.05		LOW									
48-60	6.0-20	.03		LOW									

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
3	LOW	HIGH	HIGH	LOW	MODERATE	—	—	—

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10:

3.20 MAJOR COMPONENT NAME:

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20:

3.30 MAJOR COMPONENT NAME:

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS

3.31 NONCONTRASTING INCLUDED SOILS WITH 3.30: Footnotes

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.) W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE

G	Gravel
SG	Sandy gravel
S	Sand
COS	Coarse sand
FS	Fine sand
VFS	Very fine sand
LCOS	Loamy coarse sand
LS	Loamy sand
LFS	Loamy fine sand
LVFS	Loamy very fine sand
COSL	Coarse sandy loam
L	Sandy loam
FSL	Fine Sandy Loam
VFSL	Very fine sandy loam
SIC	Silty Clay
C	Clay
SICL	Silty clay loam
CL	Clay loam
L	Loam
SIL	Silt loam
SCL	Sandy clay loam
UWB	Unweathered bedrock
WB	Weathered bedrock

HORIZON TEXTURE MODIFIERS

CB	Cobbly
CBA	Angular Cobbly
CBV	Very cobbly
FL	Flaggy
GR	Gravelly
GRC	Coarse gravelly
GRF	Fine gravelly
GRV	Very gravelly
BR	Stratified
ST	Stony
STV	Very stony
STX	Extremely stony

STRUCTURE

SG	Single grain
1	Weak
2	Moderate
3	Strong
VF	Very fine
F	Fine
M	Medium
C	Coarse
VC	Very coarse
GR	Granular
CR	Crumb
PL	Platy
PR	Prismatic
ABK	Angular blocky
SBK	Subangular blocky
M	Massive

CONSISTENCE

Dry:

LO	Loose
SO	Soft
SH	Slightly hard
H	Hard
VH	Very hard
EH	Extremely hard

Moist:

LO	Loose
VFR	Very friable
FR	Friable
FI	Firm
VFI	Very firm
EFI	Extremely firm

SOIL MAP UNIT INTERPRETATION - ORDER - 3

USDA-SCS

SOIL MAP UNIT SYMBOL AND NAME: 141- Applebush Sandy loam, 0-2% slopes, flooded
PRESENT MAJOR LAND USES: Range
POTENTIAL FORESEEABLE USES: See below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR.	6c			3c	6s	
NIRR.						
SUITABILITY FOR RANGE SEEDING	FAIR - PRECIPITATION			POOR - PRECIPITATION	VERY POOR - DEPTH TO SAND & GRAVEL, AWC	
Shallow excavations	SEVERE - CUTBANKS CAVE			SLIGHT	SEVERE - CUT BANKS CAVE	
local streets and roads	SEVERE - FLOODS			MODERATE - FLOODS LOW STRENGTH, FROST ACTION	SLIGHT	
road fill	GOOD			FAIR - LOW STRENGTH	GOOD	
Sand source	PROBABLE			IMPROBABLE - EXCESS FINES	PROBABLE	
gravel source	PROBABLE			IMPROBABLE - EXCESS FINES	PROBABLE	
Pond Reservoir Area	SEVERE - SEEPAGE			3-4% SLOPE: MODERATE -	SEVERE - SEEPAGE	
Embankments, Dikes, Leeves	MODERATE - PIPING SEEPAGE			SEVERE - PIPING	SEVERE - SEEPAGE	

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX	SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE: Grain & Seed	Dom. Grasses + Leg.	Herb Plts		Shrubs
2.10 Applebush		NONE		Poor	Poor	Good		Good
2.20								
2.30								
2.40 Xeric, Torriorthents, coarse-loamy mixed (calcareous), frigid		NONE		Fair	Fair	Fair		Fair
2.50 Xeric Torriorthents, Sandy-Skeletal, mixed, frigid		NONE				Poor		Poor
2.60								

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS: 2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
alkali sacaton	SPAI	5-10			5-10	5-10	
basin wildrye	ELCI2	5-15			5-15	5-15	
blue grama	BOGR2	1-5			1-5	1-5	
bluebunch wheatgrass	AGSP	1-5			1-5	1-5	
bottlebrush squirreltail	SIHY	1-5			1-5	1-5	
Indian ricegrass	ORHY	1-5			1-5	1-5	
needle and thread	STCO4	2-5			2-5	2-5	
sand dropseed	SPCR	1-5			1-5	1-5	
Sandberg bluegrass	POSE	1-5			1-5	1-5	
globemallow	SPHAE	1-2			1-2	1-2	
penstemon	PENST	1-2			1-2	1-2	
Princes plume	STANL	1-2			1-2	1-2	
other perennial forbs	PPFF	1-2			1-2	1-2	
native annuals	AAFF	1-2			1-2	1-2	
Basin big sagebrush	ARTRT	1-5			1-5	1-5	
Wyoming big sagebrush	ARTRW	1-5			1-5	1-5	
Gambel oak	QUGA	1-5			1-5	1-5	
cacti		1-5			1-5	1-5	
desert peach	PRAN2	1-5			2-5	0-5	
ephedra	EPHED	0-5			2-5	0-5	
fourwing saltbush	ATCA2	2-5			5-10	5-10	
green rabbitbrush	CHRYS9	5-10			1-5	1-5	
spiny hopsage	GRSP	1-5					
RANGE SITE NAME OR NUMBER		NV-D28-3			Loamy, 8-10" p.z.	1-D28-3	
POTENTIAL PRODUCTION LBS. AC. DRY WT. FAVORABLE YEARS		700			700	700	
POTENTIAL PRODUCTION LBS. AC. DRY WT. NORMAL YEARS		400			400	400	
POTENTIAL PRODUCTION LBS. AC. DRY WT. UNFAVORABLE YEARS		300			300	300	

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2:

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY

162

USOA-BOI

SOIL SURVEY AREA: Nye Co., Sevenmile Wash MLRA: 28 DATE: BY:

SOIL MAP UNIT SYMBOL AND NAME: 162-Fishlake-Pedal Association revised: 1/30/80 PCS, AMS

1.00 SETTIND Old terrace with incised drainages, general slope is 0-4% ending in a1 wide bottom, AAP 8" AMAT 50°F FFS 75 days Elv. 7000'. Most of the ppt. falls in winter and spring, summers are warm & dry vegetation sparse shrubs.

2.00 MAP UNIT COMPOSITION

	MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME).	% IN M.U.	PHYSIODRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEDETATION TYPE
2.10	Fishlake sandy loam, 2 to 4 percent slopes -loamy, mixed, frigid, shallow Xerollic Durorgids	50	smooth terraces with U-shaped drainages; 2-4% slopes alluvium	Black sagebrush, Wyoming big sagebrush
2.20	Pedal: sandy loam, 0 to 4 percent slopes -Fine-loamy, mixed frigid Xerollic Haplorgids	40	old terrace remnants, outwash fans, lower end of terraces; 0-4% slopes; alluvium	Wyoming big sagebrush galleta; basin wildrye, some black sagebrush.
2.30				

	CONTRASTIND INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIODRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTIND CHARACTERISTICS
2.40	Coarse-loamy and sandy, mixed (calcareous) frigid Xeric Torriorthents, 0 to 4 percent slopes, flooded	5			Smaller U & V-shaped drainage bottoms 0-4% slopes	no argillic horizon; or duripan occasional flooding
2.60	Four Star soils, 0 to 2 percent slopes Cumulic Haplaquolls, coarse-loamy, mixed frigid	1			floodplains, 0-2% slopes	no argillic horizon; dark colors; moist profile.
2.80	Applebutt sandy loam, 2-6% slopes (Coarse-loamy, mixed, frigid Xerollic Camborthids)	4			Recent outwash fans and U-shaped drainages, 2 to 8 percent slopes	No argillic horizon or duripan.

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Fishlake sandy loam, 2 to 4 percent slopes

DEPTH (INS.)	USOA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-5	SL	0	0	SM	A-4, A-2-4	1, C, PL	SO	VFR	6.6-7.3		
5-10	CL	0	0	ML, CL	A-6, A-4	2, M, SBK	SH	VFR	6.6-7.3		
10-15	L	0	0	ML, CL, CL-ML	A-6, A-4	2, M, SBK	SH	VFR	7.4-7.8		
18+	IND					M	EH	EFI	7.9-8.4		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. DRP.	FLOODIND FREQUENCY	FLOODIND DURATION	FLOODIND MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE	
0-5	2.0-6.0	.14-.16		LOW	.30	1	D	NONE	-	-	>5.0	-	-
5-10	0.2-0.6	.19-.21		MODERATE									
10-18	0.6-2.0	.16-.18		MODERATE									
18+					WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
					3	LOW-MODERATE	HIGH	HIGH	LOW	MODERATE	10-20	THICK	-

3.11 NONCONTRASTIND INCLUDED SOILS WITH 3.10:

3.20 MAJOR COMPONENT NAME: Pedal: Sandy loam, 0 to 4 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-4	SL	0	0	SM	A-4, A-2-4	2, VC, PL & 2, PR	SO	VFR	7.9-8.4		
4-25	CL, L	0	0	ML, CL, CL-ML	A-4, A-6	2, MSC, SBK	H, SH	FI, FR	7.9-8.4		
25-46	FSL	0	0	SM, SM-SC	A-4	M	SH	VFR	7.9-8.4		
46-60	LFS	0	0	SM	A-2-4	M	SO	VFR	7.9-8.4		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-4	2.0-6.0	.11-.13		LOW	.24	5		NONE					
4-25	0.2-0.6	.18-.20		MODERATE									
25-46	2.0-6.0	.13-.15		LOW									
46-60	6.0-20	.09-.10		LOW									
					WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
					3	LOW-MOD.	HIGH	LOW	LOW	MODERATE	-		-

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20: Xerollic Calciorthids, coarse-loamy, mixed frigid on rolling surfaces between the drainageways and with terrace with local relief of about 10 feet.

3.30 MAJOR COMPONENT NAME:

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
					WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS

3.31 NONCONTRASTIND INCLUDED SOILS WITH 3.30:

4.00 ABBREVIATIONS USED PADE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.)
W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE

G	Gravel
SG	Sandy gravel
S	Sand
COS	Coarse sand
FS	Fine sand
VFS	Very fine sand
LCOS	Loamy coarse sand
LS	Loamy sand
LFS	Loamy fine sand
LVFS	Loamy very fine sand
COSL	Coarse sandy loam
SL	Sandy loam
FSL	Fine Sandy Loam
VFSL	Very fine sandy loam
SIC	Silty Clay
C	Clay
SICL	Silty clay loam
CL	Clay loam
L	Loam
SIL	Silt loam
SCL	Sandy clay loam
UWB	Unweathered bedrock
WB	Weathered bedrock

HORIZON TEXTURE MODIFIERS

CB	Cobbly
CBA	Angular Cobbly
CBV	Very cobbly
FL	Flaggy
GR	Gravelly
GRC	Coarse gravelly
GRF	Fine gravelly
GRV	Very gravelly
SR	Stratified
ST	Stony
STV	Very stony
STE	Extremely stony

STRUCTURE

SG	Single grain
1	Weak
2	Moderate
3	Strong
VF	Very fine
F	Fine
M	Medium
C	Coarse
VC	Very coarse
GR	Granular
CR	Crumb
PL	Platy
PR	Prismatic
ABK	Angular blocky
SBK	Subangular blocky
M	Massive

CONSISTENCE

Dry:

LO	Loose
SO	Soft
SH	Slightly hard
H	Hard
VH	Very hard
EH	Extremely hard

Moist:

LO	Loose
VFR	Very friable
FR	Friable
FI	Firm
VFI	Very firm
EFI	Extremely firm

PADE 1

A-10

USDA-SCS

SOIL MAP UNIT INTERPRETATION - ORDER - 3

SOIL MAP UNIT SYMBOL AND NAME: 162 - Fishlake - Pedoli Taxajunct Association

PRESENT MAJOR LAND USES: Range

POTENTIAL FORESEEABLE USES: See below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR.		4c		6s	6w	
NIRR.	7s				POOR - PRECIPITATION	
SUITABILITY FOR RANGE SEEDING	VERY POOR - ROOT ZONE	POOR - PRECIPITATION				
shallow excavations	SEVERE - CEMENTED PAN	SEVERE - CU. BANKS CAVE			SEVERE - WETNESS, FLOODS	
local streets and roads	SEVERE - CEMENTED PAN, LOW STRENGTH	SEVERE - LOW STRENGTH			SEVERE - FLOODS, FROST ACTION	
road fill	POOR - THIN LAYER, LOW STRENGTH	FAIR - LOW STRENGTH			POOR - FROST ACTION	
sand source	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER			IMPROBABLE - EXCESS FINES	
gravel source	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER			IMPROBABLE - EXCESS FINES	
pond reservoir area	SEVERE - CEMENTED PAN	SEVERE - SEEPAGE			SEVERE - SEEPAGE	
embankments, dikes, levees	SEVERE - THIN LAYER PIPING	SEVERE - PIPING			SEVERE, PIPING WETNESS	

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	ORD. SYM.	WOODLAND SUITABILITY POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX	SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE Grain + Seed	Grass + Leg.	WILD HERB		SHRUBS	WETLAND PLANTS	SHALLOW WATER
2.10 Fishlake		NONE				FAIR		FAIR		
2.20 Pedoli		NONE		Poor	Poor	Fair		Fair		
2.30										
2.40 Coarse-loamy and sandy mixed frigid Xeric Torriorthents		NONE				Var.		Var.		
2.60 Fourstar		WILLOW				Good		GOOD	Fair	Poor
2.60 Applebush		None				FAIR		FAIR		

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS 2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
basin wildrye	ELCI Z	1-5		40			
bluebunch Wheatgrass	AGSP	2	3			3	
western wheatgrass	AGSM			3			
bottle brush squirreltail	SI HY	1-5	3			3	
galleta	HIJA	1-5	2			2	
Indian ricegrass	ORHY	12	12			12	
needle and thread	STCO4	10	7			7	
Thurber needlegrass	STTH2	-	4			4	
Sandberg bluegrass	POSE	1-5	2			2	
Nevada bluegrass	PONE	-		5			
Pine bluegrass	POSC	6	7			7	
Other grasses	PPGG	10		20	20	15	
forbs	PPFF	15	15	15	10	2	
winterfat	EULA6	7	2			2	
Douglas rabbitbrush	CHVI8	2	2				
black sagebrush	ARNO	25					
bud sagebrush	ARSPS	7					
Other shrubs	SSSS	6		7	4		
ephedra	EPHED	1-2	2			2	
Fourwing saltbush	ATCA2	3	8			8	
Spineless horsebrush	TECA2		2			2	
Wyoming big sagebrush	ARTRW		25			25	
Wild Rose					2		
Stiff sagebrush	GRSP	1-5	4			4	
Willow	SALIX	-			2		
basin big sagebrush	ARTRT	-		8	2		
rubber rabbitbrush	CHNA2	-					
~~Bluebunch big sagebrush~~	~~AGSP~~	~~-~~					
Sedges	CAREX	-			10		
~~Aster~~	~~ASTER~~	~~-~~					
RANGE SITE NAME OR NUMBER		Shallow Loamy NV-D28-11	Loamy 8-10" 028	Loamy Bottom 5-12"	Wet Meadow 5-10"	Loamy 8-10	
POTENTIAL PRODUCTION LBS. AC. DRY WT. FAVORABLE YEARS		650	800	2600	4000	800	
NORMAL YEARS		350		1700	2600		
UNFAVORABLE YEARS		175	400	800	1200	400	

9.00 ABBREVIATIONS USED PAGE 2:

FOOTNOTES PAGE 2:

Loamy Bottom - Slender wheatgrass AGTR 2%
Wet Meadow - Rushes JUNCA 25%; Alkali saltgrass DIST 5%; Alkali cordgrass SPGR 5%

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY

USOA-BOS

SOIL SURVEY AREA: Nye Co - Antelope Valley MLRA: 28 DATE: 5/19/74 BY: EM
SOIL MAP UNIT SYMBOL AND NAME: 163-Fishlake - Buster Association
1.00 SETTING Gently undulating dissected terraces, PRAP 8" MAAT 50°F, FFS 75 days, Elv. 7000 Most of the ppt falls in the winter and spring, summers are warm and dry, vegetation is mostly blackSage

9/11/81 JJK RI Rev 11/20/80 PLS, LMS

2.00 MAP UNIT COMPOSITION

	MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10	Fishlake loam, 2 to 4 percent slopes - Loamy, mixed, frigid Shallow Xerollic Durargids	50	Gently undulating terrace tops, 2-4% slopes. Old alluvium	Black Sage, Rabbitbrush, Bursage, Spiny Hopsage, squirreltail, Indian grass, Needle
2.20	Buster sandy loam, 2 to 4 percent slopes, dry - Fine-loamy, mixed, frigid Durixerollic Haplargids	40	Formed in old alluvium on undulating terrace tops; 2-4% slopes	Black Sage, rabbitbrush, grass
2.30				

	CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40	Usine gravelly loam, 15 to 30 percent slopes (Sandy-skeletal), mixed, frigid Xeric Torriorthents	5	5	10	Side slopes of drainages, 15-30% slopes	sandy-skeletal lacks argillic horizon and duripan
2.50	Applebush sandy loam, 0 to 4 percent slopes, flooded - Coarse-loamy, mixed, frigid Xerollic Calciargids	5	2	5	Flat drainage bottoms, 0-4% slopes	lacks duripan and argillic horizon, has cambic horizon
2.60						

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Fishlake loam, 2 to 4 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-5	L	0	0	SM	A-4, A-2-4	1, C, PL	SO	VFR	6.6-7.3		
5-10	CL	0	0	ML, CL	A-6, A-4	2, M, SBK	SH	VFR	6.6-7.3		
10-15	L	0	0	ML, CL, CL-ML	A-6, A-4	2, M, SBK	SH	VFR	7.4-7.8		
15+	IND					M	EH	EFI	7.9-8.4		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-5	2.0-6.0	.14-.16		LOW	.32	1	D	NONE	-	-	>5.0	-	-
5-10	0.2-0.6	.19-.21		MODERATE									
10-16	0.6-2.0	.16-.18		MODERATE									
16+													

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	CEMENTED PAN OR BEDROCK HARDNESS
3	LOW-MODERATE	HIGH	HIGH	LOW	MODERATE	10-20	THICK	-

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10:
Haploxerollic Durargids, loamy, mixed frigid, shallow (30%)

3.20 MAJOR COMPONENT NAME: Buster

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-5	SL	0	0	SM-SC, SM	A-4, A-2-4	1, M, PL	SO	VFR	6.6-7.3		
5-14	L	0	0	CL-ML, ML	A-4	2, M, SBK	SH	FR	7.4-7.8		
14-20	GR-L	10	40	GM-GC	A-2-4	1, M, SBK	SH	FR	7.4-7.8		
20-60	GR-SL	0	30	SM-SC		M	SO	VFR	7.9-8.4		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-5	2.0-6.0	.11-.13		LOW	.20	5	B	RARE	V. BRIEF	MAR-MAY	>5.0	-	-
5-14	0.6-2.0	.16-.18		LOW									
14-20	0.6-2.0	.11-.13		MODERATE									
20-60	20-6.0	.07-.09		LOW									

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	CEMENTED PAN OR BEDROCK HARDNESS
3	LOW-MOD,	HIGH	LOW	LOW	MODERATE	>60	-	-

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20:
Haploxerollic Durargids, loamy, mixed, frigid, shallow (30%)

3.30 MAJOR COMPONENT NAME:

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	CEMENTED PAN OR BEDROCK HARDNESS

3.31 NONCONTRASTINO INCLUDED SOILS WITH 3.30:

Footnotes:

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.)
W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE

G	Gravel
SG	Sandy gravel
S	Sand
COS	Coarse sand
FS	Fine sand
VFS	Very fine sand
LCOS	Loamy coarse sand
LS	Loamy sand
LFS	Loamy fine sand
LVFS	Loamy very fine sand
COSL	Coarse sandy loam
L	Sandy loam
FSL	Fine Sandy Loam
VFSL	Very fine sandy loam
SIC	Silty Clay
C	Clay
SICL	Silty clay loam
CL	Clay loam
L	Loam
SIL	Silt loam
SCL	Sandy clay loam
UWB	Unweathered bedrock
WB	Weathered bedrock

HORIZON TEXTURE MODIFIERS

CB	Cobbly
CBA	Angular Cobbly
CBV	Very cobbly
FL	Flaggy
GR	Gravelly
GRC	Coarse gravelly
GRF	Fine gravelly
GRV	Very gravelly
SR	Stratified
ST	Stony
STV	Very stony
STX	Extremely stony

STRUCTURE

SG	Single grain
1	Weak
2	Moderate
3	Strong
VF	Very fine
F	Fine
M	Medium
C	Coarse
VC	Very coarse
GR	Granular
CR	Crumb
PL	Platy
PS	Prismatic
ABK	Angular blocky
SBK	Subangular blocky
M	Massive

CONSISTENCE

Dry:

LO	Loose
SO	Soft
SH	Slightly hard
H	Hard
VH	Very hard
EH	Extremely hard

Moist:

LO	Loose
VFR	Very friable
FR	Friable
FI	Firm
VFI	Very firm
EFI	Extremely firm

172

SOIL MAP UNIT INTERPRETATION - ORDER - 3

USDA-SCS

SOIL MAP UNIT SYMBOL AND NAME: 163 - Savory-Buster Association

PRESENT MAJOR LAND USES: Range

POTENTIAL FORESEEABLE USES: see below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	1 MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE					
	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR.		4c			6c	
NIRR.	7s			6s		
SUITABILITY FOR RANGE SEEDING	VERY POOR - ROOT ZONE	POOR - PRECIPITATION			POOR - PRECIPITATION	
Shallow Excavations	SEVERE - CEMENTED PAN	SLIGHT			SEVERE - CUTBANKS CAVE	
Local Roads & Streets	SEVERE - CEMENTED PAN, LOW STRENGTH	MODERATE - FROST ACTION, FLOODS			MODERATE - FROST ACTION	
Roadfill	POOR, THIN LAYER, LOW STRENGTH	GOOD			GOOD	
Sand	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER			PROBABLE	
Gravel	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER			PROBABLE	
Pond Reservoir Area	SEVERE - CEMENTED PAN	SEVERE - SEEPAGE			SEVERE - SEEPAGE	
Embankments, Dikes, Levees	SEVERE - THIN LAYER, PIPING	MODERATE - SEEPAGE			MODERATE - PIPING, SEEPAGE	

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX	SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE GRAIN & SEED CROPS	DOMESTIC GRASSES AND LEGUMES	WILD HERB PLANTS		SHRUBS	
2.10 Savory		NONE				FAIR		FAIR	
2.20 Buster, dry		NONE		POOR	POOR	FAIR		FAIR	
2.30									
2.40 Usine		NONE						-	
2.50 Apple bush, flooded		NONE				GOOD		GOOD	
2.60									

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS					
		2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
Indian ricegrass	ORHY	12	12		12		
needle and thread	STCO4	10	10		10		
Bluebunch wheatgrass	AGSP	2	2		2		
Pine bluegrass	POSC	6	6		6		
Other grasses	PPGG	10	10		7	20	
Bottlebrush squirreltail	SIHY				2		
Basin wildrye	ELCI2					40	
Nevada bluegrass	PONE					5	
Western wheatgrass	AGSM					3	
Slender wheatgrass	AGTR					2	
Forbs	PPFF	15	15		15	15	
Basin big sagebrush	ARTRT					8	
Black sagebrush	ARARN	25	25		20		
Fourwing saltbush	ATCA2	3	3		5		
Bud sagebrush	ARSP5	7	7		3		
Ephedra	EPHED				5		
Douglas rabbitbrush	CHVI8	2	2		2		
Other shrubs	SSSS	6	6		15	7	
Winterfat	EULA5	7	7				
RANGE SITE NAME OR NUMBER		Shallow loamy 8-12"	Shallow loamy 8-12"		Shallow hill 8-12"	Loamy bottom 5-10"	
POTENTIAL PRODUCTION LBS. AC. DRY WT. FAVORABLE YEARS		650	650		500	2600	
NORMAL YEARS		350	350		270	1700	
UNFAVORABLE YEARS		175	175		175	800	

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2:

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY

USDA-BDB

SOIL SURVEY AREA: NYE CO - Sevenmile Wash MLRA: 28 DATE: 12/14/79 BY: aaK
SOIL MAP UNIT SYMBOL AND NAME: 164-Fishlake - Pedoli - Umil Association Rev. 11/30/80 pls, pms

1.00 SETTING Nearly level to strongly sloping Terrace Fans MAP 8-12", MAAT 50°F, FFS 90 days, Elevation 6980-7600', most of the ppt falls in winter and spring, summers are hot and dry, Vegetation is sparse shrubs

2.00 MAP UNIT COMPOSITION

MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10 Fishlake loam, 2 to 4 percent slopes, loamy, mixed, frigid shallow Xerollic Durargids	50	2-4%; lower parts of the fan; alluvium	black sagebrush, bluebunch wheatgrass, small rabbitbrush
2.20 Pedoli sandy loam, 4 to 15 percent slopes, Fine-loamy, mixed, frigid Xerollic Haplargids	25	4-15%; stronger sloping areas of the fan; alluvium	big sagebrush, 4-wing saltbrush, Indian ricegrass, needleandthread
2.30 Umil loam, 2 to 15 percent slopes, loamy, mixed, frigid, shallow Xerollic Durorthids	20	2-15%; stronger sloping areas of the fans (upper areas); alluvium	black sagebrush, small rabbitbrush bluebunch wheatgrass

CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40 Coarse-loamy, mixed, (calcareous), frigid Xeric Torriorthents	5			0-4% slopes, drainageways	lacks argillic or cambic horizon, coarse-loamy control section, lacks duripan, occasional flooding
2.50					
2.60					

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Fishlake loam, 2 to 4 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-5	L	0	0	SM	A-4, A-2-4	1,C,PL	SO	VFR	6.6-7.3		
5-10	CL	0	0	ML,CL	A-6, A-4	2,M,SBK	SH	VFR	6.6-7.3		
10-15	L	0	0	ML,CL,CL-ML	A-6, A-4	2,M,SBK	SH	VFR	7.4-7.8		
15+	IND					M	EH	EFI	7.9-8.4		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)
0-5	2.0-6.0	.14-.16		LOW	.37	1	D	NONE	-	-	>5.0
5-10	0.2-0.6	.19-.21		MODERATE							
10-18	0.6-2.0	.16-.18		MODERATE							
18+											

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
3	LOW-MODERATE	HIGH	HIGH	LOW	MODERATE	10-20	THICK	—

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10:

3.20 MAJOR COMPONENT NAME: Pedoli sandy loam, 4 to 15 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-4	SL	0	0	SM	A-4, A-2-4	2,VC,PL; 2,C,PR	SO	VFR	7.9-8.4		
4-25	CL,L	0	0	ML,CL,CL,ML	A-4, A-6	2,M,C, SBK	H,SH	FI,FR	7.9-8.4		
25-46	FSL	0	0	SM, SM-SC	A-4	M	SH	VFR	7.9-8.4		
46-60	LFS	0	0	SM	A-2-4	M	SO	VFR	7.9-8.4		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-4	2.0-6.0	.11-.13		LOW	.20	5	B	NONE	-	-	>5.0	-	-
4-25	0.2-0.6	.18-.20		MODERATE									
25-46	2.0-6.0	.13-.15		LOW									
46-60	6.0-20	.09-.11		LOW									

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
	LOW-HIGH	HIGH	LOW	LOW	MODERATE	-	—	—

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20:

3.30 MAJOR COMPONENT NAME: Umil loam, 2 to 15 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-3	L	0	0	ML	A-4	2,M,PL	SH	FR	7.9-9.0		
3-6	L	0	15	CL-ML,ML	A-4	1,F,CR	SH	FR	7.9-9.0		
6-13	GR-L	20	10	CL-ML,ML	A-4	M	SH	FR	7.9-9.0		
13+	IND					M	EH	EFI			

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-3	0.6-2.0	.16-.18		LOW	.43	1	D	NONE	-	-	>5.0	-	-
3-6	0.6-2.0	.14-.16		LOW									
6-13	0.6-2.0	.13-.15		LOW									
13+													

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
4L	LOW-HIGH	HIGH	MODERATE	LOW	MODERATE	10-20	THICK	—

3.31 NONCONTRASTING INCLUDED SOILS WITH 3.30:

Footnotes:

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.)
W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE

G	Gravel
SG	Sandy gravel
S	Sand
COS	Coarse sand
FS	Fine sand
VFS	Very fine sand
LCOS	Loamy coarse sand
LS	Loamy sand
LFS	Loamy fine sand
LVFS	Loamy very fine sand
COSL	Coarse sandy loam
LS	Sandy loam
FSL	Fine Sandy Loam
VFSL	Very fine sandy loam
SIC	Silty Clay
C	Clay
SICL	Silty clay loam
CL	Clay loam
L	Loam
SIL	Silt loam
SCL	Sandy clay loam
UWB	Unweathered bedrock
WB	Weathered bedrock

HORIZON TEXTURE MODIFIERS

CB	Cobbly
CBA	Angular Cobbly
CBV	Very cobbly
FL	Flaggy
GR	Gravelly
GRC	Coarse gravelly
GRF	Fine gravelly
GRV	Very gravelly
SR	Stratified
ST	Stony
STV	Very stony
STX	Extremely stony

STRUCTURE

SG	Single grain
1	Weak
2	Moderate
3	Strong
VF	Very fine
F	Fine
M	Medium
C	Coarse
VC	Very coarse
GR	Granular
CR	Crumb
PL	Platy
PR	Prismatic
ABK	Angular blocky
SBK	Subangular blocky
M	Massive

CONSISTENCE

Dry:

LO	Loose
SO	Soft
SH	Slightly hard
H	Hard
VH	Very hard
EH	Extremely hard

Moist:

LO	Loose
VFR	Very friable
FR	Friable
FI	Firm
VFI	Very firm
EFI	Extremely firm

SOIL MAP UNIT INTERPRETATION - ORDER - 3

USOA-SCS

SOIL MAP UNIT SYMBOL AND NAME: 164 - Fishlake - Pedoli - Umil Association

PRESENT MAJOR LAND USES: Range

POTENTIAL FORESEEABLE USES: See below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR.		4c		3c		
NIRR.	7s	7c	7s			
SUITABILITY FOR RANGE SEEDING	VERY POOR - ROOT ZONE	POOR - PRECIPITATION	VERY POOR - ROOT ZONE	POOR - PRECIPITATION		
Shallow Excavation	SEVERE - CEMENTED PAN	SEVERE - CUTBANKS CAVE	SEVERE - CEMENTED PAN	SLIGHT		
Local Roads & Streets	SEVERE - CEMENTED PAN, LOW STRENGTH	SEVERE - LOW STRENGTH	SEVERE - CEMENTED PAN	MODERATE - FLOODS, LOW STRENGTH, FROST ACTION		
Road fill	POOR - THIN LAYER, LOW STRENGTH	FAIR - LOW STRENGTH	POOR - THIN LAYER	FAIR - LOW STRENGTH		
Sand	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES		
Gravel	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES		
Pond Reservoir Area	SEVERE - CEMENTED PAN	SEVERE - SLEPAGE 8-15%: SEV - SLOPE, SEEP	SEVERE - CEMENTED PAN 8-15%: SEVERE - CEMENTED PAN, SLOPE	3-4%: MODERATE - SLOPE		
Embankments, Dikes, Levees	SEVERE - THIN LAYER, PIPING	SEVERE - THIN LAYER PIPING	SEVERE - THIN LAYER, PIPING	SEVERE - PIPING		

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX	SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE: Grain + Seed Crop	Pom. Grass. + Leg.	Herb. Pits		Shrubs	
2.10 Fishlake		NONE				Poor		Poor	
2.20 Pedoli		NONE		Poor	Fair	Fair		Fair	
2.30 Umil		NONE				Poor		Poor	
2.40 Coarse-loamy, mixed (calcareous) frigid Xeric Torriorthents		NONE		Fair	Fair	Fair		Fair	
2.50									
2.60									

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS: 2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
Indian ricegrass	ORHY	12	12	12	12		
Needle and thread	STCO4	10	7	10	7		
Bluebunch wheatgrass	AGSP	2	3	2	3		
Pine bluegrass	POSC	6	7	6	7		
Other grasses	PPG6	10		10			
Thurber needlegrass	STTH2		4		4		
Bottlebrush squirreltail	SIHY		3		3		
Sandberg bluegrass	POSE		2		2		
Galleta	HIJA		2		2		
Forbs	PPFF	15		15			
Black Sagebrush	ARARN	25		25			
Bud Sagebrush	ARSPS	7		7			
Winterfat	EULAS	7	2	7	2		
Fourwing saltbush	ATCAS	3	8	3	8		
Douglas rabbitbrush	CHVI8	2	2	2	2		
Other Shrubs	SSSS	6		6			
Wyoming big sagebrush	ARTRW		25		25		
Spiny hopsage	GRSP		4		4		
Nevada Ephedra	EPNE		2		2		
Spineless horsebrush	TECA2		2		2		
RANGE SITE NAME OR NUMBER		Shallow loamy 8-12"	Loamy 8-10"	Shallow loamy 8-12"	Loamy 8-10"		
POTENTIAL PRODUCTION LBS. AC. DRY WT. FAVORABLE YEARS		650	800	650	800		
NORMAL YEARS		350		350			
UNFAVORABLE YEARS		175	400	175	400		

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2:

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY 171

USDA-BOR

SOIL SURVEY AREA: Nye Co. Sevenmile Wash MLRA: 28 DATE: 9/25/79 BY: AAK-RZ
REVISED 7/2/90 PLS, DMS
SOIL MAP UNIT SYMBOL AND NAME: 171 Ney-Mulligan-Udelope association

1.00 SETTING Steeply sloping to very steep mountain slopes. Slopes range from 15 to 50%. Average annual precipitation is 16 to 20 inches. Mean annual air temperature is 35 to 40 degrees. The average frost free season ranges up to 70 days. Elevation is 8000 to 13200 ft. The plant community is dominated Mt Big Sage, Lodsage Mahagony and grasses.

2.00 MAP UNIT COMPOSITION

MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10 Ney Stony loam, 30 to 50 percent slopes - Loamy, mixed, Argic Lithic Cryoborolls	45	residuum Mountain side slopes, Rhyolite, 30 to 50% slopes;	Low sage, saltbrush bluegrass, buckwheat squirrel tail,
2.20 Mulligan loam, 15 to 50 percent slopes - Loamy, skeletal, mixed Argic Pachic Cryoborolls	27	Colluvial footslopes & sideslopes 15 to 50% slopes	Mt Big sage, snowberry, Indian paint brush bluegrass, lupine,
2.30 Udelope stony loam, 30 to 50 percent slopes - Loamy, mixed Lithic Cryoborolls	12	Convex side slopes 30 to 50%; residuum	Mt. Mahogany, open; Mt Big Sage shadgrass Snowberry

CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40 Rock outcrop, andesite	7	0.5	5	Ridgecrest points of ridges, peaks >15% slopes	mesoil -
2.50 Cryaquolls, 2 to 8 percent slopes	3	0.2	0.5	Spring, seeps, drainage ways, 2-8%	wetness
2.60 Hackwood Variant loam, 4 to 30 percent slopes - Loamy-skeletal, mixed Pachic Cryoborolls	4	0.5	5	Snow pockets, colluvial slopes, 4-30% slopes	No argillic horizon
2.70 Loamy-skeletal, mixed Pachic Cryoborolls	2	2	10	West facing slopes on mountain Top: 8 to 15%.	Mt. Mahogany Thicket

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Ney stony loam, 30 to 50 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-6	SL-L	1-5	25-?	SM	A-4	2,F,GR	SO	VFR	6.6-7.8		
6-9	GR-L	0	45	GM-GC,GM	A-2-4	2,F,SBK	SH	FR	6.6-7.3		
9-12	SL	0	0	SM,SM-SC	A-4,A-2-4	2,F,SBK	SO	VFR	6.6-7.3		
12+	R										

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-6	0.6-2.0	.13-.15		LOW	.32	1	D	NONE	—	—	> 5.0	—	—
6-9	0.6-2.0	.11-.13		LOW									
9-12	2.0-6.0	.11-.13											
12+	R												

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK CEMENTED PAN THICKNESS	CEMENTED PAN OR BEDROCK BEDROCK HARDNESS
5	HIGH	MODERATE	HIGH	LOW	MODERATE	10-20	—	HARD

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10:

3.20 MAJOR COMPONENT NAME: Mulligan loam, 15 to 50 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-8	L	0	0-15	ML,CL-ML	A-4	2M-F,SBK	SH	FR	6.6-7.3		
8-23	CBV-L	45	25	SM,SM,SC	A-4	1,F,GR	SO	LO	6.6-7.3		
23-60	CBV-SCL	50	10	SC	A-2-6,A-6	M	H	FI	6.6-7.3		
	L										

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-8	0.6-2.0	.14-.16		LOW	.43	1	B	NONE	—	—	7.5.0	—	—
8-23	0.6-2.0	.09-.11		LOW									
23-60	0.2-0.6	.10-.12		MODERATE									

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK CEMENTED PAN THICKNESS	CEMENTED PAN OR BEDROCK BEDROCK HARDNESS
5	HIGH	MODERATE	MODERATE	LOW	MODERATE	7.60	—	—

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20:

3.30 MAJOR COMPONENT NAME: Udelope stony loam, 30 to 50 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-5	ST-L	15	10	SM	A-2-4	2,F-M,GR	SH	VFR	6.6-7.3		
5-18	GR-SL	15	35	SM	A-2-4	2,F-M,SBK	SH	VFR	6.6-7.3		
18+	R								6.6-7.3		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-5	6.0-2.0	.08-.10		LOW	.15	1	D	NONE	—	—	7.5.0	—	—
5-18	6.0-2.0	.07-.08		LOW									
18+													

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK CEMENTED PAN THICKNESS	CEMENTED PAN OR BEDROCK BEDROCK HARDNESS
3	HIGH	HIGH	LOW	LOW	MODERATE	9-20	—	HARD

3.31 NONCONTRASTING INCLUDED SOILS WITH 3.30:

Footnotes

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.)
W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE

G	Gravel
SG	Sandy gravel
S	Sand
COS	Coarse sand
FS	Fine sand
VFS	Very fine sand
LCOS	Loamy coarse sand
LS	Loamy sand
LFS	Loamy fine sand
LVFS	Loamy very fine sand
COSL	Coarse sandy loam
LS	Sandy loam
FSL	Fine Sandy Loam
VFSL	Very fine sandy loam
SIC	Silty Clay
C	Clay
SICL	Silty clay loam
CL	Clay loam
L	Loam
SIL	Silt loam
SCL	Sandy clay loam
UWB	Unweathered bedrock
WB	Weathered bedrock

HORIZON TEXTURE MODIFIERS

CB	Cobbly
CBA	Angular Cobbly
CBV	Very cobbly
FL	Flaggy
GS	Grevelly
GRC	Coarse gravelly
GRF	Fine gravelly
GRV	Very gravelly
ST	Stratified
ST	Stony
STV	Very stony
STE	Extremely stony

STRUCTURE

SG	Single grain
1	Weak
2	Moderate
3	Strong
VF	Very fine
F	Fine
M	Medium
C	Coarse
VC	Very coarse
GR	Granular
CB	Crumb
PL	Platy
PR	Prismatic
ABK	Angular blocky
SBK	Subangular blocky
M	Massive

CONSISTENCE

Dry:

LO	Loose
SO	Soft
SH	Slightly hard
H	Hard
VH	Very hard
EH	Extremely hard

Moist:

LO	Loose
VFR	Very friable
FR	Friable
FI	Firm
VFI	Very firm
EFI	Extremely firm

171

SOIL MAP UNIT INTERPRETATION - ORDER - 3

USOA-SCS

SOIL MAP UNIT SYMBOL AND NAME: 171- Ney-Mulligan-Udelope Association

PRESENT MAJOR LAND USES: Range

POTENTIAL FORESEEABLE USES: see below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR. / NIRR.	7s	7s	7s	8s	6w	7s
SUITABILITY FOR RANGE SEEDING	VERY POOR - ROOT ZONE, AWC	30 - 50%: VERY	VERY POOR-ROOT ZONE, AWC			15-30%; POOR-SLOPE
	30-50%: V. POOR-R.Z., AWC, SL	POOR - SLOPE	30-50%: V. POOR-SLOPE, R.Z., AWC			15-30%; SEVERE - SLOPE
Shallow Excavation	SEVERE - DEPTH TO ROCK	MODERATE - LARGE STONES, SLOPE	SEVERE - DEPTH TO ROCK			15-30%; SEVERE - SLOPE
	30-50%; SEVERE - SLOPE, D.T.R.	15-50%; SEVERE - SLOPE	30-50%; SEVERE SLOPE D.T.R			25-30%; SEVERE - SLOPE
Local Roads & St.	SEVERE - DEPTH TO ROCK	SEVERE - LOW STRENGTH	SEVERE - DEPTH TO ROCK			IMPROBABLE - EXCESS FINES
	30-50%; SEV. - SLOPE, D.T.R	15-50%; SEVERE - SLOPE, LOW ST.	30-50% SEV. SLOPE D.T.R			IMPROBABLE - EXCESS FINES
Roadfill	POOR - AREA RECLAIM, THIN LAYER	POOR - LOW STRENGTH	POOR - AREA RECLAIM, THIN			SEVERE - SEEPAGE
	30-50%: SEV. SLOPE A.R., T.L.	25-50%; POOR - SLOPE, LOW ST.	LAYER 30-50%; SEV. SLOPE A.R. T.L.			8-30%; SEV. - SLOPE, SEEP
Sand	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES	SEVERE - EXCESS FINES, THIN LAYER			SEVERE - SEEPAGE
Gravel	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES	SEVERE - EXCESS FINES THIN LAYER			
Pond Reservoir	SEVERE - DEPTH TO RIXK	15-50%; SEVERE - SLOPE	SEVERE - DEPTH TO ROCK			
	30-50%; SEV. - SLOPE D.T.R		30-50%, SEV. - DEPTH TO ROCK, SL			
Embankments, Dikes, Levees	SEVERE - PIPING, THIN LAYER	SEVERE - LARGE STONES	SEVERE THIN LAYER			

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY			SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE			
	ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX	Herb. Pls	Hardwood Trees	Shrubs	
2.10 Ney	4	NONE		Poor		Poor	
2.20 Mulligan	4	NONE		Good		Good	
2.30 Udelope	12	NONE		Poor		Poor	
2.40 Rock Outcrop, Andisols		NONE		-		-	
2.50 Cryaquolls		NONE		var.		var.	
2.60							

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS					
		2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
Mtn. brome	BRMA4		10			15	
Slender wheatgrass	AGTR					7	
Columbia needlegrass	STCO9		5			5	5
Bluebunch wheatgrass	AGSP	10	5	5		3	
Bottlebrush Squirreltail	SIHY					2	2
Pine blue grass	POSC			4		5	5
Other grasses	PPG6	10	5	5	2	3	6
Idaho fescue	FEID	20	20	9			
Basin wildrye	ELCI	5	5				
Letterman needlegrass	STLE4	5	5	4			
Thurber needlegrass	STTH2	5		4			5
Forbs	PPFF	10	10	12	20		
Forbs	AAFF	5	5				15
Western needlegrass	STOC2			5			
June grass	KOCR			2			
Indian ricegrass							2
Baltic rush	JUBA				8		
Douglas rabbitbrush	CHV10						2
Curlleaf Mtn Mahogany	CELE3						
Lanceleaf rabbitbrush	CHVIS			2			
Subalpine big sagebrush	ARTRVS						
Mtn Mahogany	CELE2			30			
low rabbit brush	CHNA8	5	2				
low sagebrush	ARAR8	20					
Aspen reproduction	POTR5					20	
Snowberry	SYMPH		5	7		7	3
Serviceberry	AMAL		3			5	
Currant	RIBES					3	3
Mtn Big sagebrush	ARTRV		15	7		3	
Other Shrubs	SSS	5	5	4	10	2	4
RANGE SITE NAME OR NUMBER		Clayppan 12-18"	Loamy 16-22"	Mahogany Savannah 16-22"	Wet meadow 12-25"	Aspen Woodland	Mahogany thickets 16-22"
POTENTIAL PRODUCTION LBS. AC. DRY WT. FAVORABLE YEARS		900	1400	1400		3000	1600 (16-22)
NORMAL YEARS		600	800			2500	1200
UNFAVORABLE YEARS		400	400	600		2000	800

9.00 ABBREVIATIONS USED PAGE 2: 2.40 Subalpine sagebrush ARSA13 - 15%; Rubber rabbitbrush CHNA - 5%

10.00 FOOTNOTES PAGE 2: 2.40 Sedge - CAREX - 5%; Western wheatgrass AGSM - 15%; Thickspike wheatgrass AGDA 5%; Bluegrasses POA 5%; Creeping wildrye LETR1 10%

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY 172

USOA-80B

SOIL SURVEY AREA: Tye Co. Savanmile Wash MLRA: 28 DATE: 10-15-79 BY: AAK, AMZ
Revised 1/30/80 DLC DMH
SOIL MAP UNIT SYMBOL AND NAME: 172 Ney - Perrity - Mulligan association
1.00 SETTING Mountain side slopes, shoulder sandcrests and canyons running north-south, steeply, sloping to very steep AAP 16-20", AAAT: 35-40°F, FFS <70 days
Elev 8000 - 1000'

2.00 MAP UNIT COMPOSITION

	MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10	Ney stony loam, 8 to 50 percent slopes - loamy, mixed Argic Lithic Cryoborolls	50	Formed in andesite on steep mountain sideslopes, 8-50 percent slope; residuum & colluvium	Low sage, sandberg bluegrass, bunch wheat
2.20	Perrity extremely stony loam, 30 to 50 percent slopes (loamy-skeletal, mixed, frigid Lithic Argixerolls)	15	Downslope edges of map unit, south slope areas, 30 to 50 percent slopes; residuum and colluvium	Pinyon-Juniper woodland, often open stand. Mountain big sagebrush understory.
2.30	Mulligan loam, 8 to 30 percent slopes - loamy, skeletal, mixed Argic Pachic Cryoborolls	15	Formed in colluvial areas on moderately sloping crests and sideslopes, 8-30 % slopes	Silt Big Sage, Snowberry, Indian paint brush, poa, Eriogonum

	CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40	Rock outcrop, andesite	7	.1	10	Crests, rimrocks and flows	No soil, No vegetation
2.50	Udorthents stony loam, 8 to 30 percent slopes - (Lithic Cryoborolls, loamy, mixed	8	.5	10	benches and sideslopes, 8 to 30 percent slopes.	Cryic temperature regime without aquillic or 35% rock frags. Mt. Mahogany Savanna vegetation
2.60	Lithic Cryoborolls, loamy-skeletal, mixed, 2 to 30 percent slopes.	5	.5	10	Crests, adjacent to rimrock, shoulders and benches, 2-30%	Combination of shallow cryic, and skeletal. Mountain ridge vegetation

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Ney stony loam, 8 to 50 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-6	GR-L	0	25-30	SM	A-4	2F,GR	SO	VFR	6.6-7.8		
6-9	GR-L	0	45	GM-GC, GM	A-2-4	2F,SBK	SH	FR	6.6-7.3		
9-12	SL	0	0	SM, SM-SC	A-4, A-2-4	2F,SBK	SO	VFR	6.6-7.3		
12+	R										

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-6	.6-2.0	.13-.15		LOW	.28-.37	1	D	NONE	—	—	>5.0	—	—
6-9	0.6-2.0	.11-.13		LOW									
9-12	2.0-6.0	.11-.13											
12+	R												

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK CEMENTED PAN THICKNESS	CEMENTED PAN OR BEDROCK BEDROCK HARDNESS
5	HIGH	MODERATE	HIGH	LOW	MODERATE	10-20	—	HARD

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10: Nye (loamy-skeletal taxajunct), 8-30 % slopes

3.20 MAJOR COMPONENT NAME: Perrity extremely stony loam, 30 to 50 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-3	STX-L	55	70	GM, GM-GC	A-2-4	2,F+M,GR	SO	FR	6.6-7.3		
3-7	STV-CL	45	25	CL, ML	A-6	2,M,SBK	H	FI	6.6-7.3		
7-10	STV-CL	45	50	GC	A-6	2,M,SBK	VH	VFI	6.6-7.3		
10+											

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-3	0.6-2.0	.04-.06		LOW	.20	1	D	NONE	—		>5.0	—	—
3-7	0.2-0.6	.11-.13		LOW									
7-10	0.2-0.6	.09-.10		LOW									
10+													

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK CEMENTED PAN THICKNESS	CEMENTED PAN OR BEDROCK BEDROCK HARDNESS
8	HIGH	SLIGHT	MODERATE	LOW	MODERATE	10-20	—	HARD

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20:

3.30 MAJOR COMPONENT NAME: Mulligan loam, 8 to 30 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-3	L	0	0-15	ML, CL-ML	A-4	2M,SBK	SO	FR	6.6-7.3		
3-23	CBV-L	45	25	SM, SM-SC	A-4	1,F,GR	SO	FR	6.6-7.3		
23-60	CBV-SCL	50		SC	A-2-6, A-6	M	H	FI	6.6-7.3		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-3	0.6-2.0	.14-.16		LOW	.37-.43	1	B	NONE	—	—	>5.0	—	—
3-23	0.6-2.0	.09-.11		LOW									
23-60	0.2-0.6	.10-.12		MODERATE									

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK CEMENTED PAN THICKNESS	CEMENTED PAN OR BEDROCK BEDROCK HARDNESS
5	HIGH	MODERATE	MODERATE	LOW	MODERATE	>60	—	—

3.31 NONCONTRASTING INCLUDED SOILS WITH 3.30:

Footnotes

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.)
W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE
- G Gravel
- SG Sandy gravel
- S Sand
- COS Coarse sand
- FS Fine sand
- VFS Very fine sand
- LCOS Loamy coarse sand
- LS Loamy sand
- LFS Loamy fine sand
- LVFS Loamy very fine sand
- COSL Coarse sandy loam
- L Sandy loam
- FSL Fine Sandy Loam
- VFSL Very fine sandy loam
- SIC Silty Clay
- C Clay
- SICL Silty clay loam
- CL Clay loam
- L Loam
- SIL Silt loam
- SCL Sandy clay loam
- UWB Unweathered bedrock
- WB Weathered bedrock

HORIZON TEXTURE MODIFIERS
- CB Cobbly
- GRX Angular Cobbly
- CBV Very cobbly
- FL Flaggy
- GR Gravelly
- GRC Coarse gravelly
- GRF Fine gravelly
- GRV Very gravelly
- SR Stratified
- ST Stony
- STV Very stony
- STX Extremely stony

STRUCTURE
- SG Single grain
- 1 Weak
- 2 Moderate
- 3 Strong
- VF Very fine
- F Fine
- M Medium
- C Coarse
- VC Very coarse
- GR Granular
- CR Crumb
- PL Platy
- PR Prismatic
- ABK Angular blocky
- SBK Subangular blocky
- M Massive

CONSISTENCE
Dry:
- LO Loose
- SO Soft
- SH Slightly hard
- H Hard
- VH Very hard
- EH Extremely hard

Moist:
- LO Loose
- VFR Very friable
- FR Friable
- FI Firm
- VFI Very firm
- EFI Extremely firm

571

SOIL MAP UNIT INTERPRETATION - ORDER - 3

USDA-SCS

SOIL MAP UNIT SYMBOL AND NAME: 172 - Ney - Pernty - Mulligan Association

PRESENT MAJOR LAND USES: Range

POTENTIAL FORESEEABLE USES: See below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR. / NIRR.	7s	7s	7s	8s	7s	7s
SUITABILITY FOR RANGE SEEDING	VERY POOR - ROOT ZONE, AWC	VERY POOR - ROOT ZONE,	15-30%: POOR - SLOPE, PPT.		VERY POOR - ROOT ZONE, AWC	
Shallow Excavation	30-50%: V. POOR - R.Z., AWC, SLOPE	AVAIL. WAT. CAP., SLOPE,	MODERATE - LARGE STONES, SLOPE		30-50%: V. POOR - SLOPE, R.Z., AWC	
Local Roads & Streets	SEVERE - DEPTH TO ROCK	SEVERE - DEPTH TO ROCK	15-30%: SEVERE - SLOPE		SEVERE - DEPTH TO ROCK, LARGE ST.	
Roadfill	15-50%: SEV. - SLOPE, D.T.R.	15-50%: SEVERE - SLOPE, D.T.R.	SEVERE - LOW STRENGTH		30-50%: SEV - SLOPE, D.T.R., L.S.	
Sand	SEVERE - DEPTH TO ROCK	SEVERE - DEPTH TO ROCK	15-30%; SEVERE - SLOPE, LOW ST.		SEVERE - DEPTH TO ROCK, LARGE ST.	
Gravel	15-50%: SEV. - SLOPE, D.T.R.	15-30%: SEV. - SLOPE, D.T.R.	POOR - LOW STRENGTH		30-50%; SEV - SLOPE, D.T.R., L.S.	
Pond Reservoir	POOR - AREA RECLAIM, THIN LAYER	POOR - AREA RECLAIM, THIN LAYER	25-30%: POOR - SLOPE, LOW ST.		POOR - AREA RECLAIM, LARGE ST.	
Embankments, Dikes, Levees	25-50%: SEV. - SLOPE, A.R., T.L.	25-50%: SEV. - SLOPE, A.R., T.L.	IMPROBABLE - EXCESS FINES,		30-50%: POOR - SLOPE, A.R., L.S.	
	IMPROBABLE - EXCESS FINES, THIN LAYER	SEVERE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES,		IMPROBABLE - EXCESS FINES, THIN LAYER, LARGE STONES	
	IMPROBABLE - EXCESS FINES, THIN LAYER	SEVERE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES		IMPROBABLE - EXCESS FINES, THIN LAYER, LARGE STONES	
	SEVERE - DEPTH TO ROCK	SEVERE - DEPTH TO ROCK	8-30%: SEVERE - SLOPE		SEVERE - DEPTH TO ROCK, 8-50%	
	8-50%: SEV. - SLOPE, D.T.R.	8-30%: SEV. - DEPTH TO ROCK, SLOPE			30-50%: SEV - SLOPE, D.T.R.	
	SEVERE - PIPING, THIN LAYER	SEVERE - THIN LAYER	SEVERE - LARGE STONES		SEVERE - THIN LAYER, LARGE STONES	

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY			SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE			
	ORD. SYM.	POTENTIAL PRODUCTIVITY: COMMON TREES	SITE INDEX	Hardwood Trees	Herb. Pl+s	Conf. Pl+s	Shrubs
2.10 Ney		NONE			Poor		Fair
2.20 Pernty		Pinyon Juniper			Poor	Poor	Poor
2.30 Mulligan		NONE			Good		Good
2.40 Rock Outcrop, andesite		NONE					
2.50 Udelope Taylor		Mountain mahogany		POOR	Poor		FAIR
2.60 Mtn. Meadowville Loam		NONE					

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS					
		2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
Idaho fescue	FEID	20		20		9	15
bluebunch wheatgrass	AGSP	10	5	5		5	10
basin wildrye	ELCI2	5	2	5			
Letterman needlegrass	STLE4	5		6		4	2
Thurber needlegrass	STTH2	5	15			4	
Other Perennial grass	PPG6	10	2	5		5	10
mountain brome grass	BRMA4			10			
Columbia needlegrass	STC03			5			
Western needlegrass	STC02					5	
pine bluegrass	POSC		6			4	
june grass	KOCR					2	
Indian ricegrass	ORHY						5
Sandberg bluegrass	POSE						5
bottlebrush squirreltail	SIHY						3
other perennial forbs	PPFF	10	10	10		12	5
other annual forbs	ARFF	5		5			5
goldenweed	HAPLO2						5
horsebrush	TETRA						2
black sagebrush	ARARN						5
Douglas rabbitbrush	CHVI8		5				
Wyoming big sagebrush	ARTRW		10				
Lanceleaf rabbitbrush	CHVIL					2	
Subalpine big sagebrush	ARTRV5						
Mtn. mahogany	CELE3					30	
Serviceberry	AMALX			3			
Snowberry	SYMPH		5	5		7	
Mtn. big sagebrush	ARTRV		30	15		7	
Low sagebrush	ARAR8	20					20
Low rabbitbrush	CHVI8	5		2			3
Other Shrubs	SSSS	5	10	5		4	5
RANGE SITE NAME OR NUMBER		Clayey 12-18"	P-J big sage	Loamy 16-22"		Mahogany Savannah	Mtn Ridge
POTENTIAL PRODUCTION LBS. AC. DRY WT. - FAVORABLE YEARS		900	900	1400		1400	400
POTENTIAL PRODUCTION LBS. AC. DRY WT. - NORMAL YEARS		600	600	800		1000	300
POTENTIAL PRODUCTION LBS. AC. DRY WT. - UNFAVORABLE YEARS		400	300	400		600	200

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2:

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY

182

USDA-BOS

SOIL SURVEY AREA: Nye County, Sevenmile Wash Area MLRA: 28 DATE: 11-29 BY: AAK, RPZ

SOIL MAP UNIT SYMBOL AND NAME: 182 Buster-Shreek [illegible] Association Rev. 1/30/80 PLS, DMS

1.00 SETTING Old high dissected terraces with rounded tops and moderately steep to steep sideslopes. Average annual precipitation is 10 to 16 inches with apparent aspect differences. Average annual temperature is 41 to 47°F and frost free season is 60 to 90 days. Elevations are about 6500 to 7500 feet. Most precipitation falls in winter and spring, mostly as snow. Summers are warm and dry. Vegetation on north and west slopes is mostly shrubs and grass with woodland on south and east slopes.

2.00 MAP UNIT COMPOSITION

MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10 Buster sandy loam, 8 to 30 percent slopes, moist - Fine-loamy, mixed, frigid Durixerollic Haplargids	60	The soils formed in alluvium from mostly andesitic rocks on rounded tops and long straight side slopes with mostly north and west aspects on old dissected terraces, 8-30% slopes	Wyoming big sagebrush, scattered pinyon & juniper
2.20 Shreek clay loam, 15 to 30 percent slopes, moist - Clayey-skeletal, montmorillonitic, frigid Xerollic Haplargids	27	The soils formed in alluvium from mostly rhyolitic rocks on straight and slightly concave sideslopes of old dissected terraces with mostly south and east aspects, 15-30% slopes	P/J woodland with big sagebrush understory
2.30			

CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40 Loamy, mixed, frigid, Xerollic Durorthids and Durargids - shallow	8	1	5	The soils are on gently sloping terrace remnants along the downhill edge of the map unit; 2-8% slopes	Shallow to hardpan with blue sagebrush vegetation
2.50 Applebush sandy loam, 2 to 8 percent slopes - Coarse-loamy, mixed, frigid Xerollic Camborthids	3	1	5	The soils are in V shaped drainways 2-8% slopes	Deep well drained, permeable soils
2.60 Secret Creek loam, 2 to 8 percent slopes - Coarse-loamy, mixed, frigid Aridic Haploxerolls	2	1	5	"Bottoms" of drainways 2 to 8 percent slopes	Mollic epipedon, deep, well drained, permeable

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Buster sandy loam, 8 to 30 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-5	SL	0	0	SM-SC, SM	A-4, A-2-4	1, m, PL	SO	VFR	6.6-7.3		
5-14	L	0	0	CL-ML, ML	A-4	2, m, SBK	SH	FR	7.4-7.8		
14-20	GR-L	10	40	GM-GC	A-4	1, m, SBK	SH	FR	7.4-7.8		
20-60	GR-SL	0	30	SM-SC, SM	A-2-4	M	SO	VFR	7.9-8.4		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-5	2.0-6.0	.11-.13		LOW	.20	5	B	NONE	—	—	>5.0	—	—
5-14	0.6-2.0	.16-.18		LOW									
14-20	0.6-2.0	.11-.13		MODERATE									
20-60	2.0-6.0	.07-.09		LOW									

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
3	MOD-HIGH	HIGH	HIGH	LOW	MOD.	760	—	—

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10: Haploxerollic Durargids, fine-loamy, mixed, frigid; Pedal soils (Xerollic Haplargids, fine-loamy, mixed, frigid)

3.20 MAJOR COMPONENT NAME: Shreek [illegible] clay loam, 15 to 30 percent slopes, moist

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-5	CL	0	10	CL, ML	A-6	2, M, GR	SH	VFR	6.6-7.3		
5-12	GR-C	10	35	CL, CH	A-7-6	3, M, PR	EH	FI	6.1-7.3		
12-30	GRV-C	45	65	GC	A-2-7	3, MVF, SBK	EH	VFI	7.4-7.8		
30-60	GR-COSL	0	30-40	SM, GM	A-2-4	M	SH	FR	7.9-8.4		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-5	0.2-0.6	.17-.18		MODERATE	.24	5	D	NONE	—	—	>5.0	—	—
5-12	.06-0.2	.13-.14		HIGH									
12-30	.06-0.2	.07-.08		MODERATE									
30-60	2.0-6.0	.07-.08		LOW									

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
4	HIGH	MODERATE	HIGH	LOW	LOW	>60	—	—

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20: Pedal gravelly loam, 15-30% slopes

3.30 MAJOR COMPONENT NAME:

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS

3.31 NONCONTRASTING INCLUDED SOILS WITH 3.30:

Footnotes

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.) W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE

G	Gravel
SG	Sandy gravel
S	Sand
COS	Coarse sand
FS	Fine sand
VFS	Very fine sand
LCOS	Loamy coarse sand
LS	Loamy sand
LFS	Loamy fine sand
LVFS	Loamy very fine sand
COSL	Coarse sandy loam
SL	Sandy loam
FSL	Fine sandy Loam
VFSL	Very fine sandy loam
SIC	Silty Clay
C	Clay
SICL	Silty clay loam
CL	Clay loam
L	Loam
SIL	Silt loam
SCL	Sandy clay loam
UWB	Unweathered bedrock
WB	Weathered bedrock

HORIZON TEXTURE MODIFIERS

CB	Cobbly
CBA	Angular Cobbly
CBV	Very cobbly
FL	Flaggy
GR	Gravelly
GRC	Coarse gravelly
GRF	Fine gravelly
GRV	Very gravelly
ST	Stratified
ST	Stony
STV	Very stony
STX	Extremely stony

STRUCTURE

SG	Single grain
1	Weak
2	Moderate
3	Strong
VF	Very fine
F	Fine
M	Medium
C	Coarse
VC	Very coarse
GR	Granular
CR	Crumb
PL	Platy
PR	Prismatic
ABK	Angular blocky
SBK	Subangular blocky
M	Massive

CONSISTENCE

Dry:

LO	Loose
SO	Soft
SH	Slightly hard
H	Hard
VH	Very hard
EH	Extremely hard

Moist:

LO	Loose
VFR	Very friable
FR	Friable
FI	Firm
VFI	Very firm
EFI	Extremely firm

A-151

.581

SOIL MAP UNIT INTERPRETATION - ORDER - 3

USDA-SCS

SOIL MAP UNIT SYMBOL AND NAME: 182 Buster - Shreen Taxadjunct Association

PRESENT MAJOR LAND USES: Rangeland and P/J Woodland

POTENTIAL FORESEEABLE USES: See below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR.					6c	3c
NIRR.	7s	7s		6s		
SUITABILITY FOR RANGE SEEDING	POOR- PRECIPITATION SLOPE	15-30% - POOR - SLOPE PPT.			POOR PRECIPITATION	POOR - PRECIPITATION
Shallow Excavation	15-30%; SEVERE - SLOPE	15-30%; SEVERE - SLOPE			SEVERE - CUTBANKS CAVE	SLIGHT
Local Roads & Streets	15-30%; SEVERE - SLOPE	15-30%; SEVERE - SLOPE			MODERATE - FROST ACTION	MODERATE - LOW STRENGTH, FROST ACTION
Roadfill	25-30%; POOR - SLOPE	25-30%; POOR SLOPE			GOOD	FAIR - LOW STRENGTH
Sand	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE EXCESS FINES			PROBABLE	IMPROBABLE - EXCESS FINES
Gravel	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES			PROBABLE	IMPROBABLE - EXCESS FINES
Pond Reservoir	SEVERE - SEEPAGE	15-30%; SEVERE - SLOPE			SEVERE - SEEPAGE	MODERATE - SEEPAGE, SLOPE
Embankments, Dikes, Leeves	8-30%; SEV. - SLOPE, SEEP. MODERATE - SEEPAGE	MODERATE - SEEPAGE			MODERATE - PIPING, SEEPAGE	SEVERE - PIPING

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX	SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE Grain & Seed	Grass & Legume	Wild Herb	Conif. Plts	Shrubs
2.10 Buster, moist		Pinyon Pine, Utah Juniper				FAIR	POOR	FAIR
2.20 Shreen		Pinyon Pine, Utah Juniper				FAIR	Fair	FAIR
2.30								
2.40 Loamy, mixed, frigid Xerollic Durorthids & Durargids		NONE				POOR		POOR
2.50 3.5-10 Applebush		NONE				Fair		Fair
2.60 2.5		NONE		Fair	Fair-Poor	Fair		Fair

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS 2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
blue bunch wheat grass	AGSP	20	2		2	20	20
Thurber needlegrass	STTH2	15	12			15	15
Indian ricegrass	ORHY	5	10		12	5	5
Pine bluegrass	POSC	2				2	2
basin wildrye	ELCI2	2				2	2
Sandberg bluegrass	POSE	2				2	2
bottlebrush squirreltail	SIHY	2	2			2	2
other grasses	PPG6		4		10		
needle and thread	STCO4				10		
pine bluegrass	POSC				6		
Forbs	PFEF	15	10		15	15	
fourwing saltbush	ATCA5				3		
winterfat	EULA5				7		
bud sagebrush	ARSP5				7		
ephedra	EPHED		5				
black sagebrush	ARARN		40		25		
Wyoming big sagebrush	ARTRW						
sod/for Mtn big sagebrush	ARTRV	25				25	25
Douglas rabbitbrush	CHVI8	2	5			2	2
rubber rabbitbrush	CHNA	2				2	2
Service berry	AMALN	2				2	2
Spineless horsebrush	TECA2	1				1	1
other shrubs	5555		10		6		
RANGE SITE NAME OR NUMBER		Loamy 10-12"	PJ Big Sagebrush		Shallow Loamy 8-12"	Loamy 10-12"	Loamy 10-12"
POTENTIAL PRODUCTION LBS. AC. DRY WT. FAVORABLE YEARS		900	725		650	900	900
NORMAL YEARS			500		350		
UNFAVORABLE YEARS		500	250		175	500	500

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2:

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY

191

USDA-BOI

SOIL SURVEY AREA: Nye Co., Sevenmile Wash Area MLRA: 28 DATE: 4/14/79 BY: CM

SOIL MAP UNIT SYMBOL AND NAME: 191 - Pedoli - Shipley Association Rev. 1/30/80, PLS, DMS

1.00 SETTING Nearly level fans and springs, summers are warm and dry, vegetation is planted crested wheatgrass MAP 8" MAAT 50°F FFS 75 days, Elv. 6300' Ppt = of it ppt fall in [illegible]

2.00 MAP UNIT COMPOSITION

	MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10	Pedoli: Sandy loam, 2 to 4 percent slopes - Fine-loamy, mixed, frigid Xerollic Haplargids	85	Nearly level old alluvial fans, 2-4% slopes; alluvium	Crested wheatgrass, Wyomingences Rabbitbrush
2.20	Shipley loam, 0 to 4 percent slopes - Coarse-loamy, mixed (calcareous) frigid Xeric Torriorthents	13	narrow inset fans at the main fan edge, nearly level to gently sloping; 1-4% slopes; alluvium	white sage, Russian thistle, halogeton
2.30				

	CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40	Applebush Sandy loam, 0 to 2 percent slopes - Coarse-loamy, mixed, frigid Xerollic Camborthids	1	.5	1.5	Gently sloping swales and along major drains, 0-2% slopes	Salic horizon, lacks argillic horizon
2.50	Secret Creek Sandy loam, 0 to 2 percent slopes coarse-loamy, mixed, frigid Aridic Haploxerolls	1	.5	1.5	gently sloping swales and along major drains; 0-2% slopes	Mollic epipedon
2.60						

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Pedoli Sandy loam, 2 to 4 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-4	SL	0	0	SM	A-4, A-2-4	2, VC, PL & 2, C, PR	SO	VFR	7.9-8.4		
4-25	CL, L	0	0	ML, CL, CL-ML	A-4, A-6	2, M-C, SBK	H, SH	FI, FR	7.9-8.4		
25-46	FSL	0	0	SM, SM-SC	A-4	M	SH	VFR	7.9-8.4		
46-60	LFS	0	0	SM	A-2-4	M	SO	VFR	7.9-8.4		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-4	2.0-6.0	.11-.13		LOW	.24	5	B	NONE	—	—	>6.0	—	—
4-25	0.2-0.6	.18-.20		MODERATE									
25-46	2.0-6.0	.13-.15		LOW									
46-60	6.0-20	.09-.10		LOW									

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
	LOW-HIGH	HIGH	HIGH	LOW	MODERATE	—	—	—

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10:

3.20 MAJOR COMPONENT NAME: Shipley loam, 0 to 4 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-6	L	0	0	SM, SM-SC	A-4	2F, PL	SH	FR	7.9-8.4		
6-60	SL	0	0	SM, SM-SC	A-4	M	SH	FR	7.9-8.4		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS K	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-6	0.6-2.0	.15-.17		LOW	.37	5	B	RARE	V. BRIEF	MAR-MAY	75.0	—	—
6-60	0.6-2.0	.19-.21		LOW									

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
4L	LOW-MOD.	MODERATE	LOW	LOW	MODERATE	>60	—	—

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20:

3.30 MAJOR COMPONENT NAME:

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS

3.31 NONCONTRASTING INCLUDED SOILS WITH 3.30: Fuelwater

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.)
W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE

G	Gravel
SG	Sandy gravel
S	Sand
COS	Coarse sand
FS	Fine sand
VFS	Very fine sand
LCOS	Loamy coarse sand
LS	Loamy sand
LFS	Loamy fine sand
LVFS	Loamy very fine sand
COSL	Coarse sandy loam
SL	Sandy loam
FSL	Fine Sandy Loam
VFSL	Very fine sandy loam
SIC	Silty Clay
C	Clay
SICL	Silty clay loam
CL	Clay loam
L	Loam
SIL	Silt loam
SCL	Sandy clay loam
UNW	Unweathered bedrock
WB	Weathered bedrock

HORIZON TEXTURE MODIFIERS

CB	Cobbly
CBA	Angular Cobbly
CBV	Very cobbly
FL	Flaggy
GR	Gravelly
GRC	Coarse gravelly
GRF	Fine gravelly
GRV	Very gravelly
ST	Stratified
ST	Stony
STV	Very stony
STX	Extremely stony

STRUCTURE

SG	Single grain
1	Weak
2	Moderate
3	Strong
VF	Very fine
F	Fine
M	Medium
C	Coarse
VC	Very coarse
GR	Granular
CR	Crumb
PL	Platy
PR	Prismatic
ABK	Angular blocky
SBK	Subangular blocky
M	Massive

CONSISTENCE

Dry:

LO	Loose
SO	Soft
SH	Slightly hard
H	Hard
VH	Very hard
EH	Extremely hard

Moist:

LO	Loose
VFR	Very friable
FR	Friable
FI	Firm
VFI	Very firm
EFI	Extremely firm

SOIL MAP UNIT INTERPRETATION - ORDER - 3

USDA-SCS

SOIL MAP UNIT SYMBOL AND NAME: 191 - Pedoli - Shipley Association
PRESENT MAJOR LAND USES: Range
POTENTIAL FORESEEABLE USES: See below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR.	4c	3c		6c	3c	
NIRR.	-					
SUITABILITY FOR RANGE SEEDING	POOR - PRECIPITATION	POOR - PRECIPITATION		POOR - PRECIPITATION	POOR - PRECIPITATION	
Shallow Excavation	SEVERE - CUTBANKS CAVE	SLIGHT		SEVERE - CUTBANKS CAVE	SLIGHT	
Local Roads & Streets	SEVERE - LOW STRENGTH	MODERATE - FLOODS LOW STRENGTH, FROST ACTION		MODERATE - FROST ACTION	MODERATE - LOW STRENGTH FROST ACTION	
Roadfill	FAIR - LOW STRENGTH	FAIR - LOW STRENGTH		GOOD	FAIR, LOW STRENGTH	
Sand	IMPROBABLE - EXCESS FINES	IMPROBABLE - EXCESS FINES		PROBABLE	IMPROBABLE - EXCESS FINES	
Gravel	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES		PROBABLE	IMPROBABLE - EXCESS FINES	
Pond Reservoir	SEVERE - SEEPAGE	3-4% : MODERATE - SLOPE		SEVERE - SEEPAGE	MODERATE - SEEPAGE SLOPE	
Embankments, Dikes Leeves	SEVERE - PIPING	SEVERE - PIPING		MODERATE - PIPING SEEPAGE	SEVERE - PIPING	

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX	SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE Grain & Seed	Grass & Legumes	Wild Herb		Shrubs	
2.10 Pedoli		NONE		Poor	Poor	FAIR		FAIR	
2.20 Shipley		NONE		Fair	Fair	FAIR		FAIR	
2.30									
2.40 Applebush		NONE		Poor	Poor	FAIR		FAIR	
2.50 Sweet Creek		NONE							
2.60									

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS 2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
basin wildrye	ELCI2	-	1-2		-	-	
blue bunch wheatgrass	AGSP	5-12	2-5		5-12	5-12	
blue grama	BOGR2	1-5	-		1-5	1-5	
bottle brush Squirreltail	SIHY	1-5	2-5		1-5	1-5	
galleta	HIJA	1-5	1-2		1-5	1-5	
Indian rice grass	ORHY	5-10	10-15		5-10	5-10	
needle and thread	STCO4	5-10	5-10		5-10	5-10	
Sand dropseed	SPCR	1-5	1-2		1-5	1-5	
Sandberg bluegrass	POSE	-	1-2		-	-	
Thickspike wheatgrass	AGDA	1-5	-		1-5	1-5	
western wheatgrass	AGSM	-	1-2		-	-	
buckwheat	ERIOG	1-2	1-2		1-2	1-2	
Globemallow	SPHAE	1-2	1-2		1-2	1-2	
penstemon	PENST	1-2	1-2		1-2	1-2	
princes plume	STANL	1-2	-		1-2	1-2	
black Sagebrush	ARNO4	1-2	1-2		1-2	1-2	
bud Sagebrush	ARSPS	1-2	5-10		1-2	1-2	
cacti		1-2	1-2		1-2	1-2	
ephedra	EPHED	2-5	1-2		2-5	2-5	
fourwing Saltbush	ATCA2	5-10	2-5		5-10	5-10	
little leaf horse brush	TEGL	1-2	-		1-2	1-2	
Wyoming big sagebrush	ARTRW	15-25	1-2		15-25	15-25	
Small rabbitbrush	CHVI8	1-2	1-2		1-2	1-2	
Spiny hopsage	GRSP	2-5	1-2		2-5	2-5	
Shadscale	ATCO	-	1-5		-	-	
winterfat	EULA6		35		2	2	
RANGE SITE NAME OR NUMBER		Loamy 8-10"	Silty 8-12"		Loamy 8-10"	Loamy 8-10"	
POTENTIAL PRODUCTION LBS. AC. DRY WT. FAVORABLE YEARS		800	500		800	800	
NORMAL YEARS			300				
UNFAVORABLE YEARS		400	150		400	400	

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2:

192

USDA-BCS

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY

SOIL SURVEY AREA: Nye Co. - Sevenmile Wash Area MLRA: 28 DATE: BY:

SOIL MAP UNIT SYMBOL AND NAME: Pedoli - Buster - Applebush Association - 192 Rev. 11/30/84 PJS, DWS

1.00 SETTING Valley fill and terraces abutting rock controlled soils AAP - 8", AAAT - 50°F, FFS - 75 days, Elev. 6800 - 7000'
most ppt. falls in spring & winter

2.00 MAP UNIT COMPOSITION

	MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10	Pedoli sandy loam, 2 to 4 percent slopes - Fine-loamy, mixed, frigid Xerollic Haplargids	55	low terraces; 2-4% slopes; alluvium	Big Sagebrush, Utah Juniper, crested wheatgrass
2.20	Buster sandy loam, 2 to 8 percent slopes - Fine-loamy, mixed, frigid Dur. Xerollic Haplargids	25	fingers of low terraces; 2-8% slopes; alluvium	Big Sagebrush, Indian ricegrass
2.30	Applebush sandy loam, 0 to 4 percent slopes - Coarse-loamy, mixed, frigid Xerollic Camborthids	15	swales; 0-4% slopes, alluvium	Big Sagebrush, crested wheatgrass

	CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40	Diana soils, 4 to 15 percent slopes - Loamy, mixed, frigid Lithic Xerollic Haplargids	2	1	2	Rock ledges and outcrop areas, 4-15% slopes	Shallow to bedrock, Sparse vegetation
2.50	Coarse-loamy and loamy-skeletal, mixed (calcareous), frigid Xeric Torriorthents	3	1	5	drows and drainageways, 2-8% slopes	lacks cambic horizon and 75% coarse fragments
2.60						

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Pedoli sandy loam, 2 to 4 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-4	SL	0	0	SM	A-4, A-2-4	2, VC, PL & 2C, PR	SO	VFR	7.9-8.4		
4-25	CL, L	0	0	ML, CL, CL-ML	A-4, A-6	2, M TO C, SBK	H, SH	FI, FR	7.9-8.4		
25-46	FSL	0	0	SM, SM-SC	A-4	M	SH	VFR	7.9-8.4		
46-60	LFS	0	0	SM	A-2-4	M	SO	VFR	7.9-8.4		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-4	2.0-6.0	.11-.13		LOW	.24	5	B	NONE	-	-	>5.0	-	-
4-25	0.2-0.6	.18-.20		MODERATE									
25-46	2.0-6.0	.13-.15		LOW									
46-60	6.0-20	.09-.10		LOW									

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
3	LOW-MOD	HIGH	HIGH	LOW	MODERATE	-	-	-

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10:

3.20 MAJOR COMPONENT NAME: Buster sandy loam, 2 to 8 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-5	SL	0	0	SM-SC, SM	A-4, A-2-4	1, M, PL	SO	VFR	6.6-7.3		
5-14	L	0	0	CL-ML, ML	A-4	2, M, SBK	SH	FR	7.4-7.8		
14-20	GR-L	10	40	GM-GC	A-4	1, M, SBK	SH	FR	7.4-7.8		
20-60	GR-SL	0	30	SM-SC, SM	A-2-4		SO	VFR	7.9-8.4		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-5	2.0-6.0	.11-.13		LOW	.20	5	B	RARE	V. BRIEF	MAR-MAY	>5.0	-	-
5-14	0.6-2.0	.16-.18		LOW									
14-20	0.6-2.0	.11-.13		MODERATE									
20-60	2.0-6.0	.07-.09		LOW									

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
3	LOW-MOD	HIGH	LOW	LOW	MOD.	>60	-	-

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20:

3.30 MAJOR COMPONENT NAME: Applebush sandy loam, 0 to 4 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-33	SL	0	10-15	SM-SC, SM	A-2-4	1, M, SBK; 1, S, PL	SH	VFR	6.6-7.3		
33-36	VFSL	0	5	ML, SM	A-4	M	SH	VFR	7.9-8.4		
36-48	CBV-LS	30	40	SM	A-1-b	M	LO	LO	7.4-7.8		
48-60	GRV-S	0	55	GP	A-1-a, A-1-b	SG	LO	LO	7.4-7.8		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-33	2.0-6.0	.09-.11		LOW	.20	5	B	RARE	V. BRIEF	MAR-MAY	>5.0	-	-
33-36	0.6-2.0	.15-.16		LOW									
36-48	6.0-20	.04-.05		LOW									
48-60	6.0-20	.03		LOW									

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
3	LOW-MODERATE	HIGH	LOW	LOW	MODERATE	>60	-	-

3.31 NONCONTRASTINO INCLUOED SOILS WITH 3.30:

Footnotes:

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.)
W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE

G	Gravel
SG	Sandy gravel
S	Sand
COS	Coarse sand
FS	Fine sand
VFS	Very fine sand
LCOS	Loamy coarse sand
LS	Loamy sand
LFS	Loamy fine sand
LVFS	Loamy very fine sand
COSL	Coarse sandy loam
SL	Sandy loam
FSL	Fine Sandy Loam
VFSL	Very fine sandy loam
SIC	Silty Clay
C	Clay
SICL	Silty clay loam
CL	Clay loam
L	Loam
SIL	Silt loam
SCL	Sandy clay loam
UWB	Unweathered bedrock
WB	Weathered bedrock

HORIZON TEXTURE MODIFIERS

CB	Cobbly
CBA	Angular Cobbly
CBV	Very cobbly
FL	Flaggy
GR	Grevelly
GRC	Coarse gravelly
GRF	Fine gravelly
GRV	Very gravelly
ST	Stratified
ST	Stony
STV	Very stony
STX	Extremely stony

STRUCTURE

SG	Single grain
1	Weak
2	Moderate
3	Strong
VF	Very fine
F	Fine
M	Medium
C	Coarse
VC	Very coarse
GR	Granular
CR	Crumb
PL	Platy
PR	Prismatic
ABK	Angular blocky
SBK	Subangular blocky
M	Massive

CONSISTENCE

Dry:

LO	Loose
SO	Soft
SH	Slightly hard
H	Hard
VH	Very hard
EH	Extremely hard

Moist:

LO	Loose
VFR	Very friable
FR	Friable
FI	Firm
VFI	Very firm
EFI	Extremely firm

SOIL MAP UNIT INTERPRETATION - ORDER - 3

USDA-SCS

SOIL MAP UNIT SYMBOL AND NAME: 192 - Pedoli - Buster - Applebush Association

PRESENT MAJOR LAND USES: Range

POTENTIAL FORESEEABLE USES: see below

8.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR.						
NIRR.	4c	4c	6c	7s	6c	
SUITABILITY FOR RANGE SEEDING	POOR - PRECIPITATION	POOR - PRECIPITATION	POOR - PRECIPITATION	VERY POOR - ROOT ZONE AVG.		
Shallow Excavations	SEVERE - CUTBANKS CAVE	SLIGHT	SEVERE - CUTBANKS CAVE	SEVERE - DEPTH TO ROCK		
Local Roads + Streets	SEVERE - LOW STRENGTH	MODERATE - FROST ACTION	MODERATE - FROST ACTION	SEVERE - DEPTH TO ROCK LOW STRENGTH		
Roadfill	FAIR - LOW STRENGTH	GOOD	GOOD	POOR - AREA RECLAIM THIN LAYER		
Sand	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES	PROBABLE	IMPROBABLE - EXCESS FINES, THIN LAYER		
Gravel	IMPROBABLE - EXCESS FINES THIN LAYER	IMPROBABLE - EXCESS FINES	PROBABLE	IMPROBABLE - EXCESS FINES, THIN LAYER		
Pond Reservoir	SEVERE - SEEPAGE	3-8%: MODERATE - SEEPAGE, SLOPE	SEVERE - SEEPAGE	SEVERE - DEPTH TO ROCK 8-15%: SEVERE - DEPTH TO ROCK, SLOPE		
Embankments, Dikes, Leves	SEVERE - PIPING	MODERATE - SEEPAGE	MODERATE - PIPING SEEPAGE	SEVERE - THIN LAYER		

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX	SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE: Grain + Seed	Grass + Legumes	WILD HERB. PLANTS	CONIFEROUS PLANTS	SHRUB
2.10 Pedoli		Utah Juniper		POOR	POOR	FAIR	POOR	FAIR
2.20 Buster		NONE		POOR	POOR	FAIR		FAIR
2.30 Applebush		NONE				FAIR		FAIR
2.40 Diana		Utah Juniper				POOR	POOR	POOR
2.50 (coarse-loamy and loamy-skel. mixed (calcareous), frigid Xeric Torriorthents		NONE						
2.60								

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS: 2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
bogin muldrye	ELCI2	-	-	-	2-5	-	
blue bunch wheatgrass	AGSP	5-12	5-12	5-12	5-10	5-12	
blue grama	BOGR2	1-5	1-5	1-5	1-5	1-5	
bottle brush squirreltail	SIHY	1-5	1-5	1-5	1-5	1-5	
galleta	HIJA	1-5	1-5	1-5	1-5	1-5	
Indian rice grass	ORHY	5-10	5-10	5-10	5-10	5-10	
needle and thread	STCO4	5-10	5-10	5-10	2-5	5-10	
sand dropseed	SPCR	1-5	1-5	1-5	1-5	1-5	
sandberg bluegrass	POSE	-	-	-	1-5	-	
thickspike wheatgrass	AGDA	1-5	1-5	1-5	-	1-5	
western wheatgrass	AGSM	-	-	-	1-5	-	
buckwheat	ERIOG	1-2	1-2	1-2	-	1-2	
globemallow	SPHAE	1-2	1-2	1-2	1-2	1-2	
penstemon	PENST	1-2	1-2	1-2	1-2	1-2	
princess plume	STANL	1-2	1-2	1-2	1-2	1-2	
black sagebrush	ARNO4	1-2	1-2	1-2	20-30	1-2	
bud sagebrush	ARSPS	1-2	1-2	1-2	?	1-2	
cacti		1-2	1-2	1-2	1-2	1-2	
ephedra	EPHED	2-5	2-5	2-5	1-2	2-5	
four-wing saltbush	ATCA2	5-10	5-10	5-10	1-2	5-10	
little leaf horse brush	TEGL	1-2	1-2	1-2	1-2	1-2	
Wyoming big sagebrush	ARTRW	15-25	15-25	15-25	1-2	15-25	
small rabbitbrush	CHVI5	1-2	1-2	1-2	2-5	1-2	
Spiny hopsage	GRSP	2-5	2-5	2-5	-	2-5	
shadscale	ATCO	-	-	-	1-2	-	
black greasewood	SAVE4						
winterfat	EULA5	2	2	2		2	
Spiny hopsage	GRSP	4	4	4		4	
RANGE SITE NAME OR NUMBER		Loamy 8-10"	Loamy 8-10"	Loamy 8-10"	Shallow loamy 8-10"	Loamy 8-10"	
POTENTIAL PRODUCTION LBS. AC. DRY WT. FAVORABLE YEARS		800	800	800		800	
POTENTIAL PRODUCTION LBS. AC. DRY WT. NORMAL YEARS							
POTENTIAL PRODUCTION LBS. AC. DRY WT. UNFAVORABLE YEARS		400	400	400		400	

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2:

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY 193

USDA-BOS

SOIL SURVEY AREA: NYE CO - Sevenmile Wash MLRA: 28 DATE: 11/24/79 BY: CAK

SOIL MAP UNIT SYMBOL AND NAME: 193 Pedoli - Applebush Association Revised 1/30/80 PLS, DMS

1.00 SETTING Fan facing dissected Terrace in Hicks Station Wash with narrow to broad drainage swales
MAP-8-12", MAAT - 46°F, FFS - 90 days, Elev. 6700 - 7000'; most ppt falls in spring and winter

2.00 MAP UNIT COMPOSITION

MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10 Pedoli sandy loam, 2 to 8 percent slopes, moist - Fine-loamy, mixed, frigid Xerollic Haplargids	75	Terrace tops, formed in old mixed alluvium; gently to moderately sloping slopes & (side slopes), 2-8% slopes	Wyomingensis, Rabbitbrush, Scattered Junipers, Indian Rice Grass, Poa, Sand blacksage.
2.20 Applebush sandy loam, 2 to 4 percent slopes, moist - Loamy, mixed, frigid shallow Haploxerollic Durargids	10	Swales and V-shaped drainages; alluvium, 2-4% slopes	Wyomingensis, Rabbitbrush, Indian Rice grass,
2.30			

CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40 MUNI sandy loam, 2 to 4 percent slopes, moist - Loamy, mixed, frigid, shallow Haploxerollic Durargids	8	3	8	Convex terrace tops, 2 to 4 percent slopes	Duripan Juniper savanna vegetation
2.50 - Coarse-loamy, mixed (calcareous), frigid Xeric Torriorthents, 8 to 15 percent slopes	7	2	5	Narrow or V shaped drainages areas of deposition and removal; & short moderately sloping to moderately steep slopes 8-30 % slopes	Wyoming sagebrush, Junipers, Big sagebrush, deep
2.60					

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Pedoli sandy loam, 2 to 8 percent slopes, moist

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-4	SL	0	0	SM	A-4, A-2-4	2, VC, PL & 2, C, PR	SO	VFR	7.9-8.4		
4-25	CL, L	0	0	ML, CL, CL-ML	A-4, A-6	2, MSC, SBK	H, SH	FI, FR	7.9-8.4		
25-46	FSL	0	0	SM, SM-SC	A-4	M	SH	VFR	7.9-8.4		
46-60	LFS	0	0	SM	A-2-4	M	SO	VFR	7.9-8.4		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-4	2.0-6.0	.11-.13		LOW	.24	5	B	NONE	—	—	25.0	—	—
4-25	0.2-0.6	.18-.20		MODERATE									
25-46	2.0-6.0	.13-.15		LOW									
46-60	6.0-20	.09-.11		LOW									

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK CEMENTED PAN THICKNESS	CEMENTED PAN OR BEDROCK BEDROCK HARDNESS
3	LOW-MOD	HIGH	HIGH	LOW	MODERATE	—	—	—

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10: Fine-loamy, mixed, frigid Duriverollic Haplargids

3.20 MAJOR COMPONENT NAME: Applebush sandy loam, 2 to 4 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-33	SL	0	10-15	SM-SC, SM	A-2-4	1, M, SBK; 1, C, PL	SH	VFR	6.6-7.3		
33-36	VFSL	0		ML, SM	A-4	M	SH	VFR	7.9-8.4		
36-48	CBV-LS	30	40	SM	A-1-b	M	LO	LO	7.4-7.8		
48-60	GRV-S	0	55	GP	A-1-a, A-1-b	SG	LO	LO	7.4-7.8		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-33	2.0-6.0	.09-.11		LOW	.20	5	B	RARE	V. BRIEF	MAR-MAY	>5.0	—	—
33-36	0.6-2.0	.15-.16		LOW									
36-48	6.0-20	.04-.05		LOW									
48-60	6.0-20	.03		LOW									

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK CEMENTED PAN THICKNESS	CEMENTED PAN OR BEDROCK BEDROCK HARDNESS
3	LOW-MODERATE	HIGH	LOW	LOW	MODERATE	—	—	—

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20:

3.30 MAJOR COMPONENT NAME:

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK CEMENTED PAN THICKNESS	CEMENTED PAN OR BEDROCK BEDROCK HARDNESS

3.31 NONCONTRASTING INCLUDED SOILS WITH 3.30: Fastedes

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.)
W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE

G	Gravel
SG	Sandy gravel
S	Sand
COS	Coarse sand
VFS	Fine sand
VFS	Very fine sand
LCOS	Loamy coarse sand
LS	Loamy sand
LFS	Loamy fine sand
LVFS	Loamy very fine sand
COSL	Coarse sandy loam
LS	Sandy loam
FSL	Fine Sandy Loam
VFSL	Very fine sandy loam
SIC	Silty Clay
C	Clay
SICL	Silty clay loam
CL	Clay loam
L	Loam
SIL	Silt loam
SCL	Sandy clay loam
UWB	Unweathered bedrock
WB	Weathered bedrock

HORIZON TEXTURE MODIFIERS

CB	Cobbly
CBA	Angular Cobbly
CBV	Very cobbly
FL	Flaggy
GB	Gravelly
GRC	Coarse gravelly
GRF	Fine gravelly
GRV	Very gravelly
ER	Stratified
ST	Stony
STV	Very stony
STE	Extremely stony

STRUCTURE

SG	Single grain
1	Weak
2	Moderate
3	Strong
VF	Very fine
F	Fine
M	Medium
C	Coarse
VC	Very coarse
GR	Granular
CB	Crumb
PL	Platy
PR	Prismatic
ABK	Angular blocky
SBK	Subangular blocky
M	Massive

CONSISTENCE

Dry:

LO	Loose
SO	Soft
SH	Slightly hard
H	Hard
VH	Very hard
EH	Extremely hard

Moist:

LO	Loose
VFR	Very friable
FR	Friable
FI	Firm
VFI	Very firm
EFI	Extremely firm

SOIL MAP UNIT INTERPRETATION - ORDER - 3

USDA-SCS

SOIL MAP UNIT SYMBOL AND NAME: Pedoli - Applebush - [illegible] Association (193)

PRESENT MAJOR LAND USES: Range

POTENTIAL FORESEEABLE USES: See below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR.	Vc	[illegible]		6s	6s	
CAPABILITY SUBCLASS- NIRR.	IIc	6c				
SUITABILITY FOR RANGE SEEDING	POOR - PRECIPITATION	POOR - PRECIPITATION			POOR - PPT	
Shallow Excavations	SEVERE - CUTBANKS CAVE	SEVERE - CUTBANKS CAVE			15-30%; SEVERE - SLOPE	
Local Roads + Streets	SEVERE - LOW STRENGTH	MODERATE - FROST ACTION			15-30%; SEVERE - SLOPE	
Roadfill	FAIR - LOW STRENGTH	GOOD			26-30%; SEVERE - SLOPE	
Sand	IMPROBABLE - EXCESS FINES, THIN LAYER	PROBABLE			IMPROBABLE-EXCESS-FINES	
Gravel	IMPROBABLE - EXCESS FINES, THIN LAYER	PROBABLE			IMPROBABLE - EXCESS FINES	
Pond Reservoir	SEVERE - SEEPAGE	SEVERE - SEEPAGE			8-30%. SEVERE - SLOPE	
Embankments, Dikes, Leeves	SEVERE - THIN LAYER PIPING	MODERATE - PIPING, SEEPAGE			SEVERE - PIPING	

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX	SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE GRAIN & SEED CROPS	GRASSES & LEGUMES	WILD HERB PLANTS	CONIFEROUS PLANTS	SHRUBS
2.10 Pedoli, moist		Few Juniper		POOR	POOR	FAIR	V. Poor	FAIR
2.20 Applebush, moist		NONE				POOR		POOR
2.30								
2.40 Muni, moist		Some Juniper				FAIR	POOR	FAIR
2.50 Coarse-loamy, mixed (calcareous), frigid xeric Torriorthents		NONE				FAIR		FAIR
2.60								

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS 2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
bluebunch wheatgrass	AGSP	20	20		10	20	
Thurber needlegrass	STTH2	15	15		5	15	
Indian ricegrass	ORHY	5	5		2	5	
Pine bluegrass	POSC	2	2			2	
Basin wildrye	ELCI2	2	2			2	
Sandberg bluegrass	POSE	2	2		3	2	
bottlebrush squirreltail	SIHY	2	2			2	
needle and thread	STCO4				5		
other Grasses					5		
Forbs		15	15			15	
Forbs, perennial	PPFF				10		
Forbs, annual	AAFF				5		
black sagebrush	ARAR8				20		
antelope bitterbrush	PUTR2				5		
Littleleaf mtn mahogany	CELE12				5		
Cliffrose	COMES				5		
ephedra	EPHED				5		
Other shrubs	5555				10		
Wyoming big sagebrush and/or Mtn big sagebrush	ARTRW ARTRV	25	25			25	
Douglas rabbitbrush	CHVI8	2	2			2	
Rubber rabbitbrush	CHNA	2	2			2	
Serviceberry	AMAL2	2	2			2	
Spineless horsebrush	TECA2	1	1			1	
Utah juniper	JUOS				5 11-16"		
RANGE SITE NAME OR NUMBER		Loamy 10-12"	Loamy 10-12"		Juniper Savannah	Loamy 10-12"	
POTENTIAL PRODUCTION LBS. AC. DRY WT. FAVORABLE YEARS		900	900		500	900	
POTENTIAL PRODUCTION LBS. AC. DRY WT. NORMAL YEARS					300		
POTENTIAL PRODUCTION LBS. AC. DRY WT. UNFAVORABLE YEARS		500	500		250	500	

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2:

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY 194

USDA-SCS

SOIL SURVEY AREA: Nye Co. Sevenmile Wash Area MLRA: 29 DATE: 11-30-79 BY: AAK, MPZ
SOIL MAP UNIT SYMBOL AND NAME: 194 Pedoli - Muni - Punchbowl Association Revised 11/30/80 RLS, DMS

1.00 SETTING Mainly rolling dissected terraces with scattered small bedrock controlled hills. Some dissected terrace sideslopes are shallow to bedrock.
AAP-8", AMMT-50° F, FFS-75, Elev. 7,000'-8,500'; most ppt. falls in spring + winter

2.00 MAP UNIT COMPOSITION

MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10 Pedoli sandy loam, 2 to 8 percent slopes, moist - Fine-loamy, mixed, frigid Xerollic Haplargids	40	Soils formed in mixed alluvium from mostly rhyolitic rock on rolling terrace tops and sideslopes, 2-8% slopes	Wyoming big sagebrush
2.20 Muni sandy loam, 2 to 8 percent slopes - Loamy, mixed, frigid, Shallow Haploxerollic Durargids	35	Soils formed in mixed alluvium from mostly rhyolitic rocks on terrace tops and side slopes; 2-8% slopes	Wyoming big sagebrush (Cercocarpus scattered)
2.30 Punchbowl sandy loam, 4 to 15 percent - Loamy, mixed, frigid Lithic Xerollic Haplargids	15	Soils formed in residuum on small hills with rhyolitic bedrock and on rhyolite exposures on terrace edges and sideslopes, 4-15% slopes	Black sagebrush, scattered junipers.

CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40 - coarse-loamy, mixed (calcareous), frigid Xeric Torriorthents, 2 to 8 percent slopes	6			short steep terrace sideslopes; 8-30% slopes	lacks argillic horizon, coarse-loamy control section, deep
2.50 Crozier Creek loam, 2 to 4 percent slopes - Coarse-loamy, mixed, frigid Aridic Haploxerolls	2			U shaped drainageways and narrow valley fills, 2-4% slopes	mollic epipedon, deep, coarse-loamy control section, lacks argillic horizon deep
2.60 Applebush sandy loam, 2 to 4 percent slopes, moist - Coarse-loamy, mixed, frigid Xerollic Camborthids	2			Edge of drainage and valley fill, 2-4% slopes	lacks argillic horizon, coarse-loamy control section, deep

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Pedoli sandy loam, 2 to 8 percent slopes, moist

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-4	SL	0	0	SM	A-4, A-2-4	2,VC,PL-2,C,PR	SO	VFR	7.9-8.4		
4-25	CL,L	0	0	ML,CL,CL-ML	A-4, A-6	2,M-C,SBK	H,SH	FI,FR	7.9-8.4		
25-46	FSL	0	0	SM, SM-SC	A-4	M	SH	VFR	7.9-8.4		
46-60	LFS	0	0	SM	A-2-4		SO	VFR	7.9-8.4		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-4	2.0-6.0	.11-.13		LOW	.24	5	B	NONE	-	-	>5.0	-	-
4-25	0.2-0.6	.18-.20		MODERATE									
25-46	2.0-6.0	.13-.15		LOW									
46-60	6.0-20	.09-.11		LOW									

EROSION HAZARD WIND EROD. GRP.	EROSION HAZARD WATER	CORROSIVITY WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
3	LOW-HIGH	HIGH	HIGH	LOW	MODERATE	-	-	-

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10:

3.20 MAJOR COMPONENT NAME: Muni sandy loam, 2 to 8 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-6	SL	0	0-10	SM-SC, SM	A-2-4, A-4	1,M,GR	SO	VFR	7.9-8.4		
6-12	SCL	0	0-10	SM-SC, SC	A-2-6, A-6	2,M,SBK	SH	FR	7.9-8.4		
12-34	IND										
34-60	GR-S,S	0	0-40	SM, SW-SM	A-1-b, A-3, A-24	SG	L	L	7.9-9.0		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS K	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-6	2.0-6.0	.10-.11		LOW	.32	1	D	NONE	-	-	>5.0	-	-
6-12	0.2-0.6	.17-.18		MODERATE									
12-34													
34-60	>2.0	.04-.06		LOW									

EROSION HAZARD WIND EROD. GRP.	EROSION HAZARD WATER	CORROSIVITY WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
3	LOW-HIGH	HIGH	MODERATE	LOW	MODERATE	10-20	THICK	-

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20:

3.30 MAJOR COMPONENT NAME: Punchbowl sandy loam, 4 to 15 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-3	SL	0	0	SM-SC, SM	A-2-4, A-4	1,F,GR	SO	VFR	7.9-7.8		
3-7	SCL	0	0	SM-SC, SM	A-4, A-6	2,M,SBK	H	FI	7.9-8.4		
7-11	GR.C	0	30	CL, ML	A-7-6, A6	M	VH	VFI	7.9-8.4		
11+	R	0	0								

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-3	2.0-6.0	.11-.13		LOW	.37	1	D	NONE	-	-	>6.0	-	-
3-7	0.2-0.6	.14-.16		MODERATE									
7-11	.06-0.2	.11-.13		MODERATE									
11+													

EROSION HAZARD WIND EROD. GRP.	EROSION HAZARD WATER	CORROSIVITY WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
3	MOD-HIGH	HIGH	HIGH	LOW	MODERATE	10-20	-	HARD

3.31 NONCONTRASTING INCLUDED SOILS WITH 3.30:

Footnotes

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.)
W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE
G Gravel
SG Sandy gravel
S Sand
COS Coarse sand
FS Fine sand
VFS Very fine sand
LCOS Loamy coarse sand
LS Loamy sand
LFS Loamy fine sand
LVFS Loamy very fine sand
COSL Coarse sandy loam
SL Sandy loam
FSL Fine Sandy Loam
VFSL Very fine sandy loam
SIC Silty Clay
C Clay
SICL Silty clay loam
CL Clay loam
L Loam
SIL Silt loam
SCL Sandy clay loam
UWB Unweathered bedrock
WB Weathered bedrock

HORIZON TEXTURE MODIFIERS
CB Cobbly
CBA Angular Cobbly
CBV Very cobbly
FL Flaggy
GR Gravelly
GRC Coarse gravelly
GRF Fine gravelly
GRV Very gravelly
SR Stratified
ST Stony
STV Very stony
STX Extremely stony

STRUCTURE
SG Single grain
1 Weak
2 Moderate
3 Strong
VF Very fine
F Fine
M Medium
C Coarse
VC Very coarse
GR Granular
CR Crumb
PL Platy
PR Prismatic
ABK Angular blocky
SBK Subangular blocky
M Massive

CONSISTENCE
Dry:
LO Loose
SO Soft
SH Slightly hard
H Hard
VH Very hard
EH Extremely hard
Moist:
LO Loose
VFR Very friable
FR Friable
FI Firm
VFI Very firm
EFI Extremely firm

USDA-SCS

SOIL MAP UNIT INTERPRETATION - ORDER - 3

SOIL MAP UNIT SYMBOL AND NAME: 144 Pedoli - Munil - Punchbowl Tax Association

PRESENT MAJOR LAND USES: Range

POTENTIAL FORESEEABLE USES: see below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR.	4c	7s	7s	6s	6c	3c
NIRR.						
SUITABILITY FOR RANGE SEEDING	POOR - PRECIPITATION	POOR - PRECIPITATION	VERY POOR - ROOT ZONE AWC	POOR - PPT	POOR - PRECIPITATION	POOR - PRECIPITATION
Shallow Excavations	SEVERE - CUTBANKS CAVE	SLIGHT	SEVERE - DEPTH TO ROCK	15-30%; SEVERE - SLOPE	SEVERE - CUTBANKS CAVE	SLIGHT
Local Roads & Streets	SEVERE - LOW STRENGTH	MODERATE - FROST ACTION, FLOODS	SEVERE - DEPTH TO ROCK, LOW STRENGTH	15-30%; SEVERE - SLOPE	MODERATE - FROST ACTION	MODERATE - LOW STRENGTH, FROST ACTION
Roadfill	FAIR - LOW STRENGTH	GOOD	POOR - AREA RECLAIM THIN LAYER	26-30%; SEVERE - SLOPE	GOOD	FAIR, LOW STRENGTH
Sand	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES	PROBABLE	IMPROBABLE - EXCESS FINES
Gravel	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES	PROBABLE	IMPROBABLE - EXCESS FINES
Pond Reservoir	SEVERE - SEEPAGE	SEVERE - SEEPAGE	SEVERE - DEPTH TO ROCK	8-30%: SEVERE - SLOPE	SEVERE - SEEPAGE	MODERATE - SEEPAGE SLOPE
Embankments, Dikes, Leeves	SEVERE - THIN LAYER PIPING	MODERATE - SEEPAGE	SEVERE - THIN LAYER	SEVERE - PIPING	MODERATE - PIPING SEEPAGE	SEVERE - PIPING

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY			SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE				
	ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX	GRAIN & SEED CROPS	GRASSES & LEGUMES	WILD HERB PLANTS	CONIFEROUS PLANTS	SHRUBS
2.10 Pedoli, moist		NONE		POOR	POOR	FAIR		FAIR
2.20 Muni		NONE				POOR		POOR
2.30 Punchbowl		Utah Juniper				POOR	V. POOR	POOR
2.40 Xeric Torriorthents, coarse-loamy, mixed, frigid		NONE				FAIR		FAIR
2.50 Secret Creek		NONE				FAIR		FAIR
2.60 Applebush, moist		NONE		POOR	POOR	FAIR		FAIR

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS					
		2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
basin wildrye	ELCI2	-	-	1-5	-	-	-
blue bunch wheatgrass	AGSP	5-12	5-12	5-10	5-12	5-12	5-12
blue grama	BOGR2	1-5	1-5	1-5	1-5	1-5	1-5
bottle brush squirreltail	SIHY	1-5	1-5	1-5	1-5	1-5	1-5
galleta	HIJA	1-5	1-5	1-5	1-5	1-5	1-5
Indian rice grass	ORHY	5-10	5-10	5-10	5-10	5-10	5-10
needle and thread	STCO4	5-10	5-10	5-10	5-10	5-10	5-10
Sand dropseed	SPCR	1-5	1-5	-	1-5	1-5	1-5
Sandberg bluegrass	POSE	-	-	1-5	-	-	-
Thickspike wheatgrass	AGDA	1-5	1-5	-	1-5	1-5	1-5
western wheatgrass	AGSM	-	-	-	-	-	-
buckwheat	ERIOG	1-2	1-2	1-2	1-2	1-2	1-2
globemallow	SPHAE	1-2	1-2	1-2	1-2	1-2	1-2
penstemon	PENST	1-2	1-2	1-2	1-2	1-2	1-2
princes plume	STANE	1-2	1-2	1-2	1-2	1-2	1-2
black sagebrush	ARNO4	1-2	1-2	20-30	1-2	1-2	1-2
bud sagebrush	ARSPS	1-2	1-2	5-10	1-2	1-2	1-2
cacti		1-2	1-2	1-2	1-2	1-2	1-2
ephedra	EPHED	2-5	2-5	1-2	2-5	2-5	2-5
Jointfir, saltbush	ATCA2	5-10	5-10	2-5	5-10	5-10	5-10
little leaf horsebrush	TEGL	1-2	1-2	1-2	1-2	1-2	1-2
Wyoming big sagebrush	ARTRW	15-25	15-25	1-2	15-25	15-25	15-25
Small rabbitbrush	CHVIS	1-2	1-2	2-5	1-2	1-2	1-2
Spiny hopsage	GRSP	2-5	2-5	1-2	2-5	2-5	2-5
Shadscale	ATCO	-	-	1-2	-	-	-
Green rabbitbrush	CHRYS9	-	-	1-2	-	-	-
Winterfat	KRLA2	1-2	1-2	-	1-2	1-2	1-2
Cliffrose	COMES	-	-	-	-	-	-
Milkvetch	ASTRA	-	-	-	-	-	-
Phlox	PHLOX	1-2	1-2	1-2	1-2	1-2	1-2
RANGE SITE NAME OR NUMBER		Loamy 10-12"	Loamy 10-12"	Shallow Loamy 8-10"	Loamy 8-10"	Loamy 10-12"	Loamy 10-12"
POTENTIAL PRODUCTION LBS. AC. DRY WT. FAVORABLE YEARS		900	900	650	700	900	900
POTENTIAL PRODUCTION LBS. AC. DRY WT. NORMAL YEARS				350			
POTENTIAL PRODUCTION LBS. AC. DRY WT. UNFAVORABLE YEARS		500	500	175	400	500	500

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2:

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY

195

USDA-BOS

SOIL SURVEY AREA: Nye Co. - Sarcobatus Wash Area — MLRA: 28 — DATE: — BY: Rev. 11/30/80 PLS, DMS

SOIL MAP UNIT SYMBOL AND NAME: 195 - Pedoli - Shreek - Locane Association

1.00 SETTING: footslopes, backslopes and shoulders of upland hills; AAP - 11 to 16", AAAT - 41-47°F, FFS - 80 days, Elev. 6600' to 8900'; most ppt. falls in spring & winter

2.00 MAP UNIT COMPOSITION — MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10 Pedoli sandy loam, 4 to 15 percent slopes, high elevation - Fine-loamy, mixed, frigid Xerollic Haplargids	46	footslopes of upland hills; 4-15% slopes; colluvium & alluvium	P/J - Mt. Big Sagebrush understory
2.20 Shreek clay loam, 8 to 30 percent slopes - Clayey-skeletal, montm., nilliontic, frigid Xerollic Haplargids	30	backslopes and shoulders of upland hills; 8 to 30 percent slopes; colluvium and/or residuum;	P/J - Mt. Big Sagebrush understory
2.30 Locane extremely stony loam, 8 to 30 percent slopes - Clayey-skeletal, montmorillonitic, frigid Lithic Xerollic Haplargids	20	backslopes and shoulders of upland hills; 8-30% slopes; residuum	Mt. Big Sagebrush - Blank - Cheatgrass understory in pockets of Blue Bunchgrass

CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40 Rock Outcrop, andesite	2			rock ledges on edge of terrace adjacent to drainageways	
2.50 Coarse loamy and loamy-skeletal, mixed (calcareous), frigid Xeric Torriorthents, 2 to 8 percent slopes	2			narrow drainageways, 2-8% slopes	loamy-skeletal or coarse loamy control section, deep, lacks argillic horizon
2.60					

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Pedoli sandy loam, 4 to 15 percent slopes, high elevation

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-4	SL	0	8	SM	A-4, A-2-4	2, VC, PL & 2, C, PR	SO	VFR	7.9-8.4		
4-25	CL, L	0	0	ML, CL, CL, ML	A-4, A-6	2, M & C, SBK	H, SH	FI, FR	7.9-8.4		
25-46	FSL	0	0	SM, SM-SC	A-4	M	SH	VFR	7.9-8.4		
46-60	LFS	0	0	SM	A-2-4	M	SO	VFR	7.9-8.4		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-4	2.0-6.0	.11-.13		LOW	.24	5	B	NONE	—	—	> 5.0	—	—
4-25	0.2-0.6	.18-.20		MODERATE									
25-46	2.0-6.0	.13-.15		LOW									
46-60	6.0-20	.09-.11		LOW									

EROSION HAZARD WIND	EROSION HAZARD WATER	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
EROD. GRP. 3	LOW-HIGH	HIGH	LOW	MODERATE	—	—	—

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10:

3.20 MAJOR COMPONENT NAME: Shreek clay loam, 8 to 30 percent slopes, moist

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-5		0	0	CL, ML	A-6	2, M, GR	SH	VFR	6.6-7.3		
5-12	GR-C	10	35	CL, CH	A-7-6	3, M, PR	EH	FI	6.1-7.3		
12-30	GRV-C	45	65	GC	A-2-7	3, MA F, SBK	EH	VFI	7.4-7.8		
30-60	GR-COSL	0	30-40	SM, GM	A-2-4	M	SH	FR	7.9-8.4		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-5	0.2-0.6	.17-.18		MODERATE	.28	5	D	NONE	—	—	> 5.0	—	—
5-12	.06-0.2	.13-.14		HIGH									
12-30	.06-0.2	.07-.08		MODERATE									
30-60	2.0-6.0	.07-.08		LOW									

EROSION HAZARD WIND	EROSION HAZARD WATER	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
EROD. GRP. 4	MOD.-HIGH	MODERATE	HIGH	LOW	> 60	—	—

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20:

3.30 MAJOR COMPONENT NAME: Locane extremely stony loam, 8 to 30 percent slopes.

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED GC	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-4	STX-L	71	85	GW-GM GP-GC GM-GC	A-2-4	1, M, SBK	SO	FR	7.4-7.8		
4-8	CBV-SIL	20	35	CL-ML, ML	A-4	M	H	FR	6.6-7.2		
8-16	CBV-CL	20	35		A-6	M	SH	VFR	6.6-7.2		
16+	R										

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-4	0.6-2.0	.03-.04		LOW	.28	1	D	NONE	—	—	> 5.0	—	—
4-8	0.6-2.0	.11-.13		LOW									
8-16	0.2-0.6	.11-.13		MODERATE									
16+													

EROSION HAZARD WIND	EROSION HAZARD WATER	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
EROD. GRP. 5	MOD.-HIGH	MODERATE	LOW	LOW	10-20	—	HARD

3.31 NONCONTRASTING INCLUDED SOILS WITH 3.30: Footnotes

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.)
W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE

G	Gravel
GG	Sandy gravel
S	Sand
COS	Coarse sand
FS	Fine sand
VFS	Very fine sand
LCOS	Loamy coarse sand
LS	Loamy sand
LFS	Loamy fine sand
LVFS	Loamy very fine sand
COSL	Coarse sandy loam
SL	Sandy loam
FSL	Fine Sandy Loam
VFSL	Very fine sandy loam
SIC	Silty Clay
C	Clay
SICL	Silty clay loam
CL	Clay loam
L	Loam
SIL	Silt loam
SCL	Sandy clay loam
UWB	Unweathered bedrock
WB	Weathered bedrock

HORIZON TEXTURE MODIFIERS

CB	Cobbly
CBA	Angular Cobbly
CBV	Very cobbly
FL	Fleggy
GR	Gravelly
GRC	Coarse gravelly
GRF	Fine gravelly
GRV	Very gravelly
SR	Stratified
ST	Stony
STV	Very stony
STX	Extremely stony

STRUCTURE

SG	Single grain
1	Weak
2	Moderate
3	Strong
VF	Very fine
F	Fine
M	Medium
C	Coarse
VC	Very coarse
GR	Granular
CR	Crumb
PL	Platy
PR	Prismatic
ABK	Angular blocky
SBK	Subangular blocky
M	Massive

CONSISTENCE

Dry:

LO	Loose
SO	Soft
SH	Slightly hard
H	Hard
VH	Very hard
EH	Extremely hard

Moist:

LO	Loose
VFR	Very friable
FR	Friable
FI	Firm
VFI	Very firm
EFI	Extremely firm

USDA-SCS

SOIL MAP UNIT INTERPRETATION - ORDER - 3

SOIL MAP UNIT SYMBOL AND NAME: 195 - Podoli - Shreek " - " Association

PRESENT MAJOR LAND USES: Range

POTENTIAL FORESEEABLE USES: See below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR, NIRR.	4c	3c	7s	8s	6s	
SUITABILITY FOR RANGE SEEDING	POOR - PRECIPITATION	POOR - PRECIPITATION	VERY POOR - ROOT ZONE, ANC, COARSE FRAGMENTS			
Shallow Excavations	SEVERE - CUTBANKS CAVE	SLIGHT	SEVERE - DEPTH TO ROCK			
			15-30%: SEV. - D.T.R., SLOPE			
Local Roads + Streets	SEVERE - LOW STRENGTH	MODERATE - FLOODS	SEVERE - LOW STRENGTH, D.T.R			
		LOW STRENGTH, FROST ACTION	15-30%; SEV. - SLOPE, L.S., D.T.R			
Roads, II	FAIR - LOW STRENGTH	FAIR, LOW STRENGTH	POOR - DEPTH TO ROCK, LOW ST.			
			25-30%: POOR - SLOPE, D.T.R, L.S.			
Sand	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES	IMPROBABLE - EXCESS FINES, THIN LAYER			
Gravel	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES	IMPROBABLE - EXCESS FINES, THIN LAYER			
Pond Reservoir	SEVERE - SEEPAGE		SEVERE - DEPTH TO ROCK			
	8-15%, SEV. - SLOPE, SEEP,	8-30%: SEV. - SLOPE	8-30%: SEV. - DEPTH T. R., SLOPE			
Embankments, Dikes, Leeves	SEVERE - THIN LAYER PIPING	SEVERE - PIPING	SEVERE - THIN LAYER			

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX	SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE: Grain + Seed Crop	Dom Grass + Leg	Herb. Plts	Con Plts.	Shrubs
2.10 Podoli, high elevation		Utah Juniper, Pinyon Pine		Poor	Poor	Fair	Fair	Fair
2.20 Shreek "		Utah Juniper, Pinyon Pine		Fair	Fair	Fair	Fair	Fair
2.30 Locane "		Utah Juniper, Pinyon Pine				Poor	Poor	Poor
2.40 Rock Outcrop, andesite		NONE				-	-	-
2.50 Coarse-loamy and loamy - skeletal, mixed (calcareous) frigid Xeric Torriorthents		NONE				Var.	-	Var.
2.60								

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS: 2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
Blue bunch wheatgrass	AGSP	10-15	10-15	10-15		20	
blue grama	BOGR4	1-5	1-5	1-5			
basin wildrye	ELCI2	2-5	2-5	2-5		2	
Indian rice grass	ORHY	2-5	2-5	2-5		-	
muttongrass	POFE	1-5	1-5	1-5			
Sandberg bluegrass	POSE	2-5	2-5	2-5		2	
Thurbers needlegrass	STTH2	10-15	10-15	10-15		15	
Western wheatgrass	AGSM	2-5	2-5	2-5			
Pine bluegrass	POSC	-	-	-		2	
bottlebrush Equisetal	SIHY	-	-	-			
buckwheat	ERIOG	1-2	1-2	1-2			
Indian paintbrush	CASI2	1-2	1-2	1-2			
blue bells	MERTE	1-2	1-2	1-2			
		-	-	-			
phlox	PHLOX	1-2	1-2	1-2			
p Eaton	PENST	1-2	1-2	1-2			
		-	-	-			
Big sage brush	ARTRW	10-15	10-15	10-15			
bitter brush	PUTR2	1-10	1-10	1-10			
Cliffrose	CAMI5	1-5	1-5	-			
ephedra	EPHED	1-2	1-2	1-2			
Wyoming or Mtn big sagebrush	ARTRV	-	-	-		25	
rubber rabbit brush	CHNA	-	-	-		2	
Spineless horsebrush	TECA2	-	-	-			
black sage brush	[illegible]N	1-2	1-2	1-2			
Douglas rabbitbrush	CHVI8	1-2	1-2	1-2			
Mountain mahogany	CERCO	1-5	1-5	1-5			
Service berry	AMELA	1-2	1-2	1-2			
rose	ROSA	1-2	1-2	1-2			
Currant	RIBES	1-2	1-2	1-2			
RANGE SITE NAME OR NUMBER		P/J woodland Big Sage	P/J woodland big sage	P/J wood big sage		Loamy 10-12"	
POTENTIAL PRODUCTION LBS. AC. ORY WT.	FAVORABLE YEARS	300-900	300-900	300-900		900	
	NORMAL YEARS	300-900	300-900	300-900			
	UNFAVORABLE YEARS	300-900	300-900	300-900		500	

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2:

201

USOA-BOI

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY

SOIL SURVEY AREA: Nye Co., Seven Mile Wash MLRA: 28 DATE: 8-19-79 BY: EM
Rev 10/1979 ARK, RPZ, DS
Rev. 2-1-80 - PLS, DMS

SOIL MAP UNIT SYMBOL AND NAME: 201 - Hackwood Variant - Harcany - Mulligan Association

1.00 SETTING Mountain ridges, side slopes and small alluvial fans and valley fills. Average Annual precipitation 16-25; Average Annual Air Temperature 50°F.; Frost Free Season - 75 days; Elev. 9000; Most of the precipitation falls in the winter and spring

2.00 MAP UNIT COMPOSITION — MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION
2.10 Hackwood Variant loam, 4 to 15 percent slopes Loamy-skeletal, mixed Pachic Cryoborolls	40	Footslopes, sideslopes, swales and streamsides, 4 to 15 % slopes; convex; alluvium	Aspen (25-30') Big Sagebrush, Big bluegrass, Lupine, Indian Paintbrush, Snowberry, Aster, Needlegrass
2.20 Harcany gravelly loam, 4 to 30 percent slopes, dry Loamy-skeletal, mixed Pachic Cryoborolls	25	Top of ridges, steep side slopes, 4 to 30 % slopes; concave; colluvium & alluvium	Nevada bluegrass, Low Sagebrush, Western wheatgrass, Squirreltail, Lupine
2.30 Mulligan loam, 4 to 15 percent slopes Loamy-skeletal, mixed Argic Pachic Cryoborolls	15	Valley Fills & Small Alluvial Fans, colluvial slopes; 4 to 15 % slopes, concave and smooth	Mountain Big Sagebrush, Western wheatgrass, Needlegrass, Indian Paintbrush, Snowberry, Phlox

CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40 Udelope stony loam, 8 to 30 percent slopes, loamy, mixed Lithic Cryoborolls	9	3	20	Ridges & Side Slopes . 8-30 % slopes with about 10% rock outcrops	Lithic; <35 coarse fragments; not pachic. Mahogany sprouts vegetation
2.50 Coarse-loamy, mixed Typic Cryaquolls	1	1	5	Footslopes, Swales, seep or spring areas 4 to 15 % slopes	Aquic moisture regime
2.60 Loamy-skeletal, mixed Pachic Cryoborolls, 8 to 30 percent slopes	4	0.1	5	Sideslopes, 8 to 30 percent slopes	Clayey, runs like Higher effective moisture than Harcany, dry.
Q.70 Rock Outcrop, Andesite	3	0.1	5	Low scarps and knobs	No soil, Vegetation

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: 11 Harcany Variant loam, 4 to 15 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-2	L	0	0	ML	A-4	1,F,GR	SO	FR	6.1-6.5		
2-11	CBV-L	45	25	ML,CL-ML,SM,SM-SC	A-4	M	SO	FR	6.1-6.5		
11-17	CBX-L	60	40	GM,GM-GC	A-4	M	LO	FR	6.1-6.5		
17-60	CBX-SL	60	65	GM	A-1-a	M	LO	FR	6.6-7.3		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-2	0.6-2.0	.16-.18		LOW	.32	1	B	NONE	—	—	>5.0	—	—
2-11	0.6-2.0	.14-.16		LOW									
11-17	0.6-2.0	.13-.14		LOW									
17-60	2.0-6.0	.11-.13		LOW									

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
5	MOD.-HIGH	MODERATE	LOW	LOW	MODERATE	760	—	—

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10:

3.20 MAJOR COMPONENT NAME: Harcany Variant gravelly loam, 4 to 30 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-2	GR-L	0	30	SM	A-4	1,F,M,SBK	SO	VFR	6.6-7.3	—	—
2-11	CBV-L	45	25	ML,CL-ML,SM,SM-SC	A-4	M	SO	FR	6.1-6.5	—	—
11-17	CBX-L	60	40	GM,GM-GC	A-4		LO	FR	6.1-6.5	—	—
17-60	CBX-SL	60	65	GM	A-1		LO	FR	6.6-7.3	—	—

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-2	0.6-2.0	.13-.14		LOW	.28	1	B	NONE	—	—	75.0	—	—
2-11	0.6-2.0	.14-.16		LOW									
11-17	0.6-2.0	.13-.14		LOW									
17-60	2.0-6.0	.11-.13		LOW									

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
5	MOD-HIGH	MODERATE	LOW	LOW	MODERATE	760	—	—

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20:

3.30 MAJOR COMPONENT NAME: Mulligan loam, 4 to 15 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-8	L	0	0-15"	ML,CL-ML	A-4	2M-F,SBK	SH	FR	6.6-7.3		
8-23	CBV-L	45"	25"	SM,SM,SC	A-4	1,F,GR	SO	LO	6.6-7.3		
23-60	CBV-SCL	50	10	SC	A-2-6,A-6	M	H	FI	6.6-7.3		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-8	0.6-2.0	.14-.16		LOW	.43	1	B	NONE	—	—	>5.0	—	—
8-23	0.6-2.0	.09-.11		LOW									
23-60	0.2-0.6	.10-.12		MODERATE									

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
	MOD. - HIGH	MODERATE	MODERATE	LOW	MODERATE	760	—	—

3.31 NONCONTRASTING INCLUDED SOILS WITH 3.30: Footslopes

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.) W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

BOULDER TEXTURE: G Gravel; SG Sandy gravel; S Sand; COS Coarse sand; FS Fine sand; VFS Very fine sand; LCOS Loamy coarse sand; LS Loamy sand; LFS Loamy fine sand; LVFS Loamy very fine sand; COSL Coarse sandy loam; SL Sandy loam; FSL Fine Sandy Loam; VFSL Very fine sandy loam; SIC Silty Clay; C Clay; SICL Silty clay loam; CL Clay loam; L Loam; SIL Silt loam; SCL Sandy clay loam; UWB Unweathered bedrock; WB Weathered bedrock

BOULDER TEXTURE MODIFIERS: CB Cobbly; CBA Angular Cobbly; CBV Very cobbly; FL Flaggy; GR Gravelly; GRC Coarse gravelly; GRF Fine gravelly; GRV Very gravelly; SR Stratified; ST Stony; STV Very stony; STX Extremely stony

STRUCTURE: SG Single grain; 1 Weak; 2 Moderate; 3 Strong; VF Very fine; F Fine; M Medium; C Coarse; VC Very coarse; GR Granular; CR Crumb; PL Platy; PR Prismatic; ABK Angular blocky; SBK Subangular blocky; M Massive

CONSISTENCE — Dry: LO Loose; SO Soft; SH Slightly hard; H Hard; VH Very hard; EH Extremely hard. Moist: LO Loose; VFR Very friable; FR Friable; FI Firm; VFI Very firm; EFI Extremely firm

108

SOIL MAP UNIT INTERPRETATION - ORDER - 3

USDA-SCS

SOIL MAP UNIT SYMBOL AND NAME: 201 Hackwood Variant-Haregany - Mulligan Association

PRESENT MAJOR LAND USES: Range

POTENTIAL FORESEEABLE USES: See Below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR.			4e			
NIRR.	7S	7S	6C	7S	6W	
SUITABILITY FOR RANGE SEEDING	GOOD	15-30%: POOR-SLOPE.	GOOD	VERY POOR-ROOT ZONE, ANC 30-50%: V. POOR-SLOPE, E2, ANC		
Shallow Excavation	8-15%: MODERATE-SLOPE	15-30%; SEVERE-SLOPE	MODERATE - LARGE STONES, SLOPE	SEVERE-DEPTH TO ROCK 15-50%; SEVERE SLOPE DTR		
Local Roads + Streets	MODERATE - FLOODS, FROST ACTION	15-30%: SEVERE-SLOPE	SEVERE - LOW STRENGTH	SEVERE - DEPTH TO ROCK 15-50%: SEV SLOPE D.T.R		
Roadfill	GOOD	25-30%: SEVERE SLOPE	POOR - LOW STRENGTH	POOR AREA RECLAIM, THIN LAYER, 25-50%: SEV SLOPE A.R. TL		
Sand	IMPROBABLE - EXCESS FINES	IMPROBABLE - EXCESS FINES	IMPROBABLE - EXCESS FINES	THIN LAYER SEVERE - EXCESS FINES		
Gravel	IMPROBABLE - EXCESS FINES	IMPROBABLE - EXCESS FINES	IMPROBABLE - EXCESS FINES	THIN LAYER SEVERE - DEPTH TO ROCK		
Pond Reservoir	SEVERE - SEEPAGE 8-15%: SEV. - SLOPE, SEEP.	SEVERE - SEEPAGE 8-30%: SEV. - SLOPE, SEEP.	SEVERE - SEEPAGE 8-15%: SEV. - SLOPE, SEEP.	SEVERE - DEPTH TO ROCK 15-50%: SEV. - DEPTH TO ROCK, S.L.		
Emb. Dikes, Levees	SEVERE - SEEPAGE	SEVERE - SEEPAGE	SEVERE - LARGE STONES	SEVERE THIN LAYER		

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX	SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE WILD HERB PLANTS	Hardwood Trees	SHRUBS	WETLAND PLANTS	SHALLOW WATER
2.10 Hackwood Variant		ASPEN		GOOD	GOOD	GOOD		
2.20 Haregany, dry.		NONE		~~GOOD~~ FAIR		- FAIR		
2.30 Mulligan		NONE		GOOD		GOOD		
2.40 Udelope		Curleaf Mountain Mahogany		POOR	V. POOR -	POOR		
2.50 Coarse - loamy, mixed Typic Cryaquolls		NONE		-	-	-	FAIR	POOR
2.60 Loamy - skeletal, mixed, Pachic				GOOD	-	FAIR	-	

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS					
		2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
						See Footnote	
Mtn. brome	BRMAQ	15		10			
Slender wheatgrass	AGTR	7					
Columbia needlegrass	STCO3	5		5			
blue bunch wheatgrass	AGSP	3	10	5	5		10
bottlebrush squirreltail	SIHY	2	3				
pine bluegrass	POSC	5			4		
other grasses	OPG6	3	10	5	5	20	10
Letterman needlegrass	STLE4		2	5	4		5
Sandberg bluegrass	POSE		5				
Indian ricegrass	OPHY		5				
Idaho fescue	FEID		15	20	9		20
basin wildrye	ELCI			5			5
junegrass	KOCR				2		
Thurber needlegrass	STTH2				4		5
Annual forbs	AAFF		5	5			5
forbs	PPFF	15	5	10		10	10
Aspen reproduction	POTRS	20					
goldenweed	HAPLO4		5				
Western needlegrass	STOC				5		
mtn. mahogany	CELE				30		
lanceleaf rabbitbrush	CHVI8				2		
low sagebrush	ARAR8		20				20
black sagebrush	ARAR		5				
low rabbitbrush	CHVI8		3	2			5
horsebrush	TERA		2				
Snowberry	SYMPH	7		5	7		
Serviceberry	AMAL	5		3			
Currant	RIBES	3					
Mtn. big sagebrush	ARTRV	2		15	7		
Other shrubs	SSSS	2	5	5	4	4	5
RANGE SITE NAME OR NUMBER		Aspen woodland	Mtn Ridge 12-16"	Loamy 16-22"	Mahogany Savannah	Wet meadow	Clayey
POTENTIAL PRODUCTION LBS. AC. DRY WT. FAVORABLE YEARS		3000	400	1400	1400	4000	
NORMAL YEARS		2500	300	800		2600	
UNFAVORABLE YEARS		2000	200	400	600	1200	

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2: 2: 50 Rushes - JUNCA 25%; alkali sacaton SCAT 12%; Inland saltgrass DIST 8%. Sedges CAREX 10%. Alkali cordgrass SPGR 50%; willow SALIX 20%; wild rose ROSA 2%; basin big sagebrush ARTRT 2%

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY

211

USDA-BOB

SOIL SURVEY AREA: Nye Co. (Sarcobatus Wash) Area MLRA: 28 DATE: 10-11-79 BY: HAK, KPZ

SOIL MAP UNIT SYMBOL AND NAME: 211 - Segura - Pernty Complex Rev. 11/30/80 PLS, DMS

1.00 SETTING Hilly and mountains with steep sides and rolling tops where the bedrock is mostly rhyolite & tuff. Average annual precipitation is 11 to 16 inches, average annual air temperature 41-47 °F. and frost-free season is about 80 days. Elevations are about 6500 to 8000 feet. Most precipitation falls in winter and spring, partly as snow. Summers are warm and dry. Vegetation is mostly Trees and shrubs with some grass.

2.00 MAP UNIT COMPOSITION

	MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10	Segura extremely stony sandy loam, 8 to 50 percent slopes - loamy, mixed, frigid Lithic Argixerolls	58	Formed in residuum on andesite & andesitic tuff on uplands with steep sides and rolling tops; 8-50 % slopes;	Pinyon-Juniper woodland with big sagebrush understory. Above 7500 feet, cover is very open and has mtn. mahogany component.
2.20	Pernty extremely stony loam, 8 to 50 percent slopes - loamy-skeletal, mixed, frigid Lithic Argixerolls	25	Formed in residuum on andesite & andesitic tuff on uplands with steep sides and rolling tops; 8-50 % slopes	Pinyon-juniper woodland with low sagebrush understory. Above 7500 feet is very open and has mt. mahogany component
2.30				

	CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40	Udelope sandy loam, 8 to 20 percent slopes - loamy, mixed Lithic Cryoborolls	9	.5	10	Upper slopes & tops with large component of rock outcrop, gently to strongly sloping; 8-30 % slopes	Lacks argillic, usually higher and cooler than major components
2.50	Coarse-loamy and loamy-skeletal mixed, frigid Pachic Haploxerolls	4	.5	5	Small colluvial valleys with gentle to moderate slopes	Deep soils and deep skeletal soils
2.60	Aquolls, 1 to 4 percent slopes	1	.1	3	Springs, seeps, and narrow riparian areas	Wetness, Wet meadow vegetation with a few riparian shrubs.
2.70	Rock Outcrop, andesite	3	.1	5	Rim rock and gently sloping to steep flows	No soil, no vegetation

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Segura extremely stony sandy loam

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-3	STX-SL	15	10	SM, SM-SC	A-2-4	2,M,GR	LO	VFR	7.9-8.4		
3-7	SCL	0	15	SM-SC, SC	A-4, A-6	2,M,SBK	SH	FI	7.9-8.4		
7-10	GR-SL	0	45	GM-SM, SM-SC, GM-GC	A-2-4	3,M,SBK	SH	FI	7.9-8.4		
10+	R										

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-3	2.0-6.0	.09-.11		LOW	.20	1	D	NONE	—	—	>5.0	—	—
3-7	0.2-0.6	.15-.17		MODERATE									
7-10	2.0-6.0	.07-.08		LOW									
10+													

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK THICKNESS	CEMENTED PAN OR BEDROCK HARDNESS
3	LOW-HIGH	HIGH	HIGH	LOW	MODERATE	10-20	—	INDURATED

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10: Aridic Xerollic Haplargids, loamy, mixed, frigid; Segura soils with <5% slopes; Lithic Argixerolls, clayey, mixed, frigid; Aridic Argixerolls, fine, montmorillonitic, frigid (slightly more than 20 inches deep to bedrock)

3.20 MAJOR COMPONENT NAME: Pernty extremely stony loam, 8 to 50 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-3	STX-L	55	70	GM, GM-GC	A-2-4	2,F-M,GR	SO	FR	6.6-7.3		
3-9	STV-CL	45	25	CL, ML	A-6	2,M,SBK		FI	6.6-7.3		
9-10	STV-CL	45	50	GC	A-6	2,M,SBK	VH	VFI	6.6-7.3		
10+	R										

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-3	0.6-2.0	.04-.06		LOW	.20	1	D	NONE	—	—	>5.0	—	—
3-7	0.2-0.6	.11-.13		LOW									
9-10	0.2-0.6	.09-.10		LOW									
10+													

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK THICKNESS	CEMENTED PAN OR BEDROCK HARDNESS
8	MOD.-HIGH	SLIGHT	MODERATE	LOW	MODERATE	10-20	—	HARD

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20: Lithic Xerollic Haplargids, loamy-skeletal, mixed, frigid; Pernty soils with >50% slopes; Lithic Argixerolls, clayey-skeletal, mixed, frigid

3.30 MAJOR COMPONENT NAME:

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST. ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK THICKNESS	CEMENTED PAN OR BEDROCK HARDNESS

3.31 NONCONTRASTING INCLUDED SOILS WITH 3.30:

Footnotes

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.)
W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE
G Gravel
SG Sandy gravel
S Sand
COS Coarse sand
FS Fine sand
VFS Very fine sand
LCOS Loamy coarse sand
LS Loamy sand
LFS Loamy fine sand
LVFS Loamy very fine sand
COSL Coarse sandy loam
SL Sandy loam
FSL Fine Sandy Loam
VFSL Very fine sandy loam
SIC Silty Clay
C Clay
SICL Silty clay loam
CL Clay loam
L Loam
SIL Silt loam
SCL Sandy clay loam
UWB Unweathered bedrock
WB Weathered bedrock

HORIZON TEXTURE MODIFIERS
CB Cobbly
CBA Angular Cobbly
CBV Very cobbly
FL Flaggy
GR Gravelly
GRC Coarse gravelly
GRF Fine gravelly
GRV Very gravelly
SR Stratified
ST Stony
STV Very stony
STX Extremely stony

STRUCTURE
SG Single grain
1 Weak
2 Moderate
3 Strong
VF Very fine
F Fine
M Medium
C Coarse
VC Very coarse
GR Granular
CR Crumb
PL Platy
PR Prismatic
ABK Angular blocky
SBK Subangular blocky
M Massive

CONSISTENCE
Dry:
LO Loose
SO Soft
SH Slightly hard
H Hard
VH Very hard
EH Extremely hard
Moist:
LO Loose
VFR Very friable
FR Friable
FI Firm
VFI Very firm
EFI Extremely firm

SOIL MAP UNIT INTERPRETATION - ORDER - 3

USDA-SCS

SOIL MAP UNIT SYMBOL AND NAME: 211 Segura-Pernty Association

PRESENT MAJOR LAND USES: Woodland, Wildlife Hapitat

POTENTIAL FORESEEABLE USES: Recreation and see below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR.						
NIRR.	7s	7s		7s	6s	7w
SUITABILITY FOR RANGE SEEDING	VERY POOR - ROOT ZONE, AWC	VERY POOR - ROOT ZON., AWC		VERY POOR - ROOT ZONE		
	30-50%: V. POOR - SLOPE, R.Z, AWC	30-50%: V. POOR - SLOPE, R.Z., AWC		A W C		
Shallow Excavations	SEVERE - DEPTH TO ROCK	SEVERE - DEPTH TO ROCK, LARGE ST.		SEVERE + DEPTH TO		
	15-50%: SEV. - SLOPE, D.T.R.	15-50%: SEV. - SLOPE, D.T.R, L.S.		BED ROCK		
local Roads + Streets	SEVERE - DEPTH TO ROCK	SEVERE - DEPTH TO ROCK, LARGE ST.		15-30%: SEVERE - SLOPE D.T.R		
	15-50%: SEV. - D.T.R, SLOPE	15-50%: SEV. - SLOPE, D.T.R, L.S.		SEVERE - DEPTH TO ROCK		
Roadfill	POOR - AREA RECLAIM	POOR - AREA RECLAIM, LARGE ST.		15-30% - SEV - SLOPE D.T.R		
	25-50%: POOR - A.R., SLOPE	25-50%: POOR - SLOPE, A.R., L.S.		POOR - AREA RECLAIM,		
Sand	IMPROBABLE - EXCESS	IMPROBABLE - EXCESS FINES,		THIN LAYER, 25-30%: SEV. SLOPE A.R. TL,		
	FINES, THIN LAYER	THIN LAYER, LARGE STONES		SEVERE - EXCESS FINES,		
Gravel	IMPROBABLE - EXCESS	IMPROBABLE - EXCESS FINES,		THIN LAYER		
	FINES, THIN LAYER	THIN LAYER, LARGE STONES		SEVERE EXCESS FINES		
Pond Reservoir Areas	SEVERE - DEPTH TO ROCK	SEVERE - DEPTH TO ROCK,		THIN LAYER		
	8-50%: SEV. - SLOPE, D.T.R.	8-50%: SEV. - SLOPE, D.T.R.		SEVERE - DEPTH TO ROCK		
Embankments, Dikes, Leeves	SEVERE - THIN LAYER	SEVERE - THIN LAYER,		8-30%: SEV. DEPTH TO ROCK, SLOPE		
		LARGE STONES		SEVERE - THIN LAYER		

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY			SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE					
	ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX	WILD HERB	HARDWD TREES	CONIFEROUS TREES	SHRUBS	WETLAND PLANTS	SHALLOW WATER
2.10 Segura		Pinyon Pine, Utah Juniper		POOR	-	POOR	POOR		
2.20 Pernty		Pinyon Pine, Utah Juniper		POOR	-	POOR	POOR		
2.30									
2.40 Udelope		NONE		Poor	-	-			
2.50 Coarse-loamy and loamy - Skeletal, mixed, frigid Pachic Haplixeralls				FAIR	-	-	FAIR		
2.60 Aquolls		TAspen		GOOD	FAIR	-	-	FAIR	POOR

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS					
		2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
Thurber needlegrass	STTH2	15	15		4	5	
bluebunch wheatgrass	AGSP	5	5		5	20	
pine bluegrass	POSC	6	6		4	5	
basin wildrye	ELCI2	2	2			3	
Junegrass	KOCR				2		
Lettermon needlegrass	STLE4				4		
Western needlegrass	STOC2				5		
Idaho fescue	FEID				9	10	
western wheatgrass	AGSM					2	
sandberg bluegrass	POSE					5	
Upper grasses	PPG6	2	2		5	5	4
Nevada bluegrass	PONE3						7
alpine timothy	PHAL2						3
Forbs	PPFF	10	10			10	25
Ann Forbs	AAFF					5	
Mtn Mahogany	CELE2				30		
sedges	CAREX						3
rushes	JUNCU						2
Willow	SALIX						2
Wild rose	ROSA						1
Silver Sagebrush	ARCA13						1
service berry	AMAL2					5	
low rabbitbrush	CHVI8					2	
horsebrush	TETRA3					3	
lanceleaf rabbitbrush	CHNI				2		
Mtn. big Sagebrush	ARTRV	30	30		7	10	
Wyoming Sagebrush	ARTRW	10	10			5	
Douglas rabbitbrush		5	5				
Snowberry	SYMPH	5	5		7		
other shrubs	SSSS	1	10		4	5	1
RANGE SITE NAME OR NUMBER		P/J Big sage	P/J Big sage		Mahogany Savannah	Loamy 12-16"	Wetmeadow 8-16"
POTENTIAL PRODUCTION LBS. AC. DRY WT. FAVORABLE YEARS		900	900		1400	1100	2000
NORMAL YEARS		600	600		1000	900	1700
UNFAVORABLE YEARS		300	300		600	700	1000

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2:

2.60 Tufted hairgrass DECAS 50%

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY

212

USDA-BOI

SOIL SURVEY AREA: Nye Co., Sevenmile Wash Area — MLRA: 28 — DATE: 10-11-79 — BY: AAT, RP2

SOIL MAP UNIT SYMBOL AND NAME: 212 - Segura-Gabka Taxadjunct - Rock outcrop - complex — Revised 1/30/80 RLS, DMS

1.00 SETTING Hills and mountains with steep sideslopes and rolling tops, where the bedrock is mostly rhyolite. Average annual precipitation is 11 to 16 inches, average annual air temperature is 41 to 47°F; and frost-free season is about 80 days. Elevations are about 6500 to 8000 ft. Most precipitation falls in winter and spring, partly as snow. Summers are warm and dry. Vegetation is mostly trees and shrubs with some grass.

2.00 MAP UNIT COMPOSITION

	MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10	Segura extremely stony sandy loam, 8 to 50 percent slopes - Loamy, mixed, frigid Lithic Argixerolls	40	Formed in residuum or andesite on uplands with steep sideslopes and rolling tops; 8-50% slopes	Pinyon-juniper woodland with big sagebrush understory. Above 7500 feet canopy is very open and has Mt. Mahogany component
2.20	Penny extremely stony loam, 8 to 50 percent slopes - Loamy-skeletal, mixed, frigid Lithic Argixerolls	34	Formed in residuum or andesite on uplands with steep sideslopes and rolling tops, 8-50% slopes	Pinyon-juniper woodland with low sagebrush understory. Above 7500 canopy is very open and has Mt. Mahogany component
2.30	Rock Outcrop, Andesite	13	Bimrock and gently sloping to steep flows.	

	CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40	Udelope sandy loam, 8 to 30 percent slopes - Loamy, mixed Lithic Cryoborolls	9	.5	10	Upper slopes and tops with large component of rock outcrop; 8-30% slopes	Lacks xeric, usually higher & cooler than major components. Mt. Mahogany savanna
2.50	Coarse-loamy, mixed, frigid Pachic Haploxerolls, 2 to 8 percent slopes	3	.5	5	Small colluvial/valleys with gentle slopes 3-8% slopes	Deep soils, pachic
2.80	Aquolls, 1 to 4 percent slopes	1	.1	.13	Small low riparian meadows & seeps	Wetness, wet meadow vegetation, riparian types

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Segura extremely stony sandy loam, 8 to 50 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-3	STX-SL	15	10	SM, SM-SC	A-2-4	2, M, GR	LO	VFR	7.9-8.4		
3-7	SCL	0	15	SM-SC, SC	A-4, A-6	2, M, SBK	SH	FI	7.9-8.4		
7-10	GR-SL	0	45	GM-SM, SM-SC, GM-GC	A-2-4	3, M, SBK	SH	FI	7.9-8.4		
10+	R										

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-3	2.0-6.0	.09-.11		LOW	.20	1	D	NONE	—	—	>5.0	—	—
3-7	0.2-0.6	.15-.17		MODERATE									
7-10	2.0-6.0	.07-.08		LOW									
10+													

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	CEMENTED PAN OR BEDROCK HARDNESS
3	LOW-HIGH	HIGH	HIGH	LOW	MODERATE	10-20	—	HARD

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10: Lithic Xerolls, Hyplixeralfs, loamy, mixed, frigid; Segura soils with slopes of <8%; Lithic Argixerolls, clayey, montmorillonitic, frigid

3.20 MAJOR COMPONENT NAME: Penny extremely stony loam, 8 to 50 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-3	STX-L	55	70	GM, GM-GC	A-2-4	2, F-M, GR	SO	FR	6.6-7.3		
3-9	STV-CL	45	25	CL, MC	A-6	2, M, SBK	H	FI	6.6-7.3		
9-10	STV-CL	45	50	GC	A-6	2, M, SBR	VH	VFI	6.6-7.3		
10+	R										
	R							FI			
	R										

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-3	0.6-2.0	.04-.06		LOW	.20	1	D	NONE	—	—	>5.0	—	—
3-9	0.2-0.6	.11-.13		LOW									
9-10	0.2-0.6	.09-.10		LOW									
10+													

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	CEMENTED PAN OR BEDROCK HARDNESS
3	MOD.-HIGH	SLIGHT	MODERATE	LOW	MODERATE	10-20	—	HARD

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20: Lithic Haplixeralfs, loamy-skeletal, mixed, frigid; Gabka soils with slopes >50%; Lithic Argixerolls, clayey-skeletal, montmorillonitic, frigid

3.30 MAJOR COMPONENT NAME: Rock outcrop, Andesite

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
R											

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
R													

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	CEMENTED PAN OR BEDROCK HARDNESS

3.31 NONCONTRASTING INCLUDED SOILS WITH 3.30: Footnotes

4.00 ABBREVIATIONS USED PAGE 1: A.W.C. - AVAILABLE WATER CAPACITY (IRR.)
W.S.C. - WATER SUPPLY CAPACITY (NIRR.)

BORISON TEXTURE

G	Gravel
SG	Sandy gravel
S	Sand
COS	Coarse sand
FS	Fine sand
VFS	Very fine sand
LCOS	Loamy coarse sand
LS	Loamy sand
LFS	Loamy fine sand
LVFS	Loamy very fine sand
COSL	Coarse sandy loam
SL	Sandy loam
FSL	Fine Sandy Loam
VFSL	Very fine sandy loam
SIC	Silty Clay
C	Clay
SICL	Silty clay loam
CL	Clay loam
L	Loam
SIL	Silt loam
SCL	Sandy clay loam
UWB	Unweathered bedrock
WB	Weathered bedrock

HORIZON TEXTURE MODIFIERS

CB	Cobbly
CBA	Angular Cobbly
CBV	Very cobbly
FL	Flaggy
GR	Gravelly
GRC	Coarse gravelly
GRF	Fine gravelly
GRV	Very gravelly
SB	Stratified
ST	Stony
STV	Very stony
STE	Extremely stony

STRUCTURE

SG	Single grain
1	Weak
2	Moderate
3	Strong
VF	Very fine
F	Fine
M	Medium
C	Coarse
VC	Very coarse
GR	Granular
CR	Crumb
PL	Platy
PR	Prismatic
ABK	Angular blocky
SBK	Subangular blocky
M	Massive

CONSISTENCE

Dry:

LO	Loose
SO	Soft
SH	Slightly hard
H	Hard
VH	Very hard
EH	Extremely hard

Moist:

LO	Loose
VFR	Very friable
FR	Friable
FI	Firm
VFI	Very firm
EFI	Extremely firm

SOIL MAP UNIT INTERPRETATION - ORDER - 3

USDA-SCS

SOIL MAP UNIT SYMBOL AND NAME: Segura - Pernty Taxed -Rock Outcrop (212)

PRESENT MAJOR LAND USES: Range

POTENTIAL FORESEEABLE USES: See below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR.						
NIRR.	7S	7S	8	7S	6S	
SUITABILITY FOR RANGE SEEDING	VERY POOR - ROOT ZONE, AWC	VERY POOR - ROOT ZONE, AWC		VERY POOR - ROOT ZONE, AWC		
Shallow Excavation	2-50%: V. POOR - SLOPE, R.Z., AWC	30-50%: V. POOR-SLOPE R.Z. AWC		30-50%: V. POOR - SLOPE, R.Z., AWC		
	SEVERE - DEPTH TO ROCK	SEVERE - DEPTH TO ROCK, LARGE		SEVERE - DEPTH TO ROCK		
Local Roads + Streets	8-50%: SEV. SLOPE, D.T.R	ST. 15-50% - SEV - SLOPE, D.T.R. L.S		15-30%: SEVERE SLOPE D.T.R		
	SEVERE - DEPTH TO ROCK	SEVERE - DEPTH TO ROCK, LARGE ST		SEVERE DEPTH TO ROCK		
Roadfill	15-50%: SEV. D.T.R, SLOPE	15-50%: SEV-SLOPE, D.T.R, L.S,		15-35%: SEVERE-SLOPE D.T.R.		
	POOR - AREA RECLAIM	POOR AREA RECLAIM, LARGE ST.		POOR-AREA RECLAIM, THIN		
Sand	25-50%: POOR-A.R, SLOPE	25-50%: POOR-SLOPE, A.R, L.S		LAYER, 25-30%: SEV SLOPE A.R.T.L		
	IMPROBABLE - EXCESS FINES	IMPROBABLE - EXCESS FINES,		SEVERE - EXCESS FINES		
Gravel	THIN LAYER	THIN LAYER, LARGE STONES		THIN LAYER		
	IMPROBABLE - EXCESS FINES,	IMPROBABLE - EXCESS FINES,		SEVERE - EXCESS FINES		
Pond Reservoir	THIN LAYER	THIN LAYER, LARGE STONES		THIN LAYER		
	SEVERE - DEPTH TO ROCK	SEVERE - DEPTH TO ROCK,		SEVERE - DEPTH TO ROCK		
Embankments, Dikes, Leeves	8-50%: SEV - SLOPE, D.T.R	8-50%: SEV SLOPE D.T.R.		8-30%: SEV. DEPTH TO ROCK S.L.		
	SEVERE - THIN LAYER	SEVERE - THIN LAYER, LARGE STONES		SEVERE THIN LAYER		

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX	SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE WILD HERB PLANTS	HARDWOOD TREES	CONIFEROUS PLANTS	SHRUBS	WETLAND PLANTS	SHALLOW WATER
2.10 Segura		Pinyon Pine, Utah Juniper		POOR	—	V. POOR	POOR		
2.20 Pernty		Pinyon Pine, Utah Juniper		POOR	—	V. POOR	POOR		
2.30 Rock Outcrop, andesite		NONE		—	—		—	—	—
2.40 Udelope		CURLLEAF MOUNTAINMAHOGANY		POOR	V. POOR	—	POOR		
2.50 Coarse-loamy, mixed, frigid Pachic Haploxerolls		NONE		POOR			POOR		
2.60 Aquolls		ASPEN		GOOD	POOR	—	POOR	FAIR	POOR

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS 2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
Thurber needlegrass	STTH2	15	15		4	5	
Bluebunch wheatgrass	AGSP	5	5		5	20	
Pine bluegrass	POSC	6	-		4	5	
Bottlebrush squirreltail	ELEL2	2	2		5	3	
Junegrass	KOCR				2		
Letterman needlegrass	STLE4				4		
Western needlegrass	STOC7				5		
Idaho fescue	FEID				9	10	
western wheatgrass	AGSM					2	
Sandberg bluegrass	POSE					5	
Other grasses	PPGG	2	2		5	6	4
Nevada bluegrass	PONE3						7
Spike timothy	PHAL2						3
Forbs	PPFF	10	10			10	25
Ann Forbs	AAFF		10			5	
Mtn Mahogany	CELE2		5		30		
Sedges	CAREX						3
rushes	JUNCU					5	3
Willow	SALIX						2
Wild rose	ROSA						1
Silver Sagebrush	ARCA13						1
Service berry	AMAL2					5	
low rabbitbrush	CHVI8					2	
horsebrush	TETRA3					3	
Lanceleaf rabbitbrush	CHNI				2		
Mtn big Sagebrush	ARTRV	30	30		7	10	
Wyoming Sagebrush	ARTR4	10	10			5	
Douglas rabbitbrush		5					
Snowberry	SYMPH	5			7		
other shrubs	SSSS	10	10		4	5	1
RANGE SITE NAME OR NUMBER		P/J big sage	P/J Big sage		Mahogany Savannah	Loamy 12-16"	Wetmeadow 8-16"
POTENTIAL PRODUCTION LBS. AC. DRY WT. FAVORABLE YEARS		900	900		1400	1100	2000
NORMAL YEARS		600	600			900	1400
UNFAVORABLE YEARS		300	300		600	400	1000

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2:

2.60 7:T Tod Tolerance DECAS 50%

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY

213

USDA-BOS

SOIL SURVEY AREA: Nye Co. - Sevenmile Wash Area MLRA: 28 DATE: BY: Revised 1/30/80 PLS, DMS

SOIL MAP UNIT SYMBOL AND NAME: 213 - Segura - Punchbowl - Locone Association

1.00 SETTING Andesite hills + mountains with hilly sideslopes
AAP - 11 to 16 inches, MAAT 41-47°F, FFS 80 days, Elev 6500 to 8000'; most ppt falls in winter + spring

2.00 MAP UNIT COMPOSITION

MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10 Segura extremely stony loam, 8 to 30 percent slopes - Loamy, mixed, frigid Lithic Argixerolls	50	shoulders of hills; 8-30% slopes; residuum - andesite + andesitic tuff	PJ woodland - big sagebrush
2.20 Punchbowl sandy loam, 8 to 30 percent slopes, moist - Loamy, mixed, frigid Lithic Xerollic Haplargids	23	8-30% slopes; shoulders + backslopes of hill and mountains; residuum	Juniper - ~~black sagebrush~~ savannah
2.30 Locone extremely stony loam, 8 to 30 percent slopes, dry - Clayey-skeletal, montmorillonitic, frigid Lithic Xerollic Haplargids	14	Shoulders + backslopes of hills + mtns. ; 8-30% slopes; residuum	Shallow Loamy, 8-12 PZ

CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40 Fishlake sandy loam, 2 to 15 percent slopes - Loamy, mixed, frigid, shallow Xerollic Durargids	4			2-15%, footslopes of hills + mtns.;	shallow to duripan
2.50 Unil loam, 2 to 15 percent slopes - Loamy, mixed, frigid, shallow Xerollic Durorthids	4			2-15%; footslopes of hills + mountains,	shallow to duripan, lacks argillic
2.60 - Coarse-loamy mixed (calcareous) frigid Xeric Torriorthents, 2 to 8 percent slopes, flooded	5			2-8% Drainage channels	lacks cambic or argillic horizon occasional flooding

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Segura extremely stony loam, 8 to 30 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-3	STX-SL	15	10	SM, SM-SC	A-2-4	2, M, GR	LO	VFR	7.9-8.4		
3-7	SCL	0	15	SM-SC, SC	A-4, A-6	2, M, SBK	SH	FI	7.9-8.4		
7-10	GR-SL	0	45	GM-SM, SM-SC, GM-GC	A-2-4	3, M, SBK	SH	FI	7.9-8.4		
10+	R										

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-3	2.0-6.0	.09-.11		LOW	.20	1	D	NONE	—	—	>5.0	—	—
3-7	0.2-0.6	.15-.17		MODERATE									
7-10	2.0-6.0	.07-.08		LOW									
10+													

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	CEMENTED PAN OR BEDROCK HARDNESS
5	LOW-HIGH	HIGH	HIGH	LOW	MODERATE	10-20	—	HARD

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10:

3.20 MAJOR COMPONENT NAME: Punchbowl sandy loam, 8 to 30 percent slopes, moist

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-3		0	0	SM-SC, SM	A-2-4, A-4	1, F, GR	SO	VFR	7.4-7.8		
3-7	SCL	30	0	SM-SC, SM	A-4, A-6	2, M, SBK	H	FI	7.9-8.4		
7-11	GR-C	0	30	CL, ML	A-7-6, A-6	M	VH	VFI	7.9-8.4		
11+		0	0								

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-3	2.0-6.0	.11-.13		LOW	.37	1	D	NONE	—	—	>6.0	—	—
3-7	0.2-0.6	.14-.16		MODERATE									
7-11	.06-0.2	.11-.13		MODERATE									
11+													

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	CEMENTED PAN OR BEDROCK HARDNESS
3	LOW-MOD.	HIGH	HIGH	LOW	MODERATE	10-20	—	Hard

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20:

3.30 MAJOR COMPONENT NAME: Locone extremely stony loam, 8 to 30 percent slopes, dry

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-4	STX-L	71	85	GW-GM, SP-SC, GM-GC	A-2-4	1, M, SBK	SO	FR	7.4-7.8		
4-8	CBV-SIL	20	35	CL-ML, ML	A-4	M	H	FI	6.6-7.2		
8-16	CBV-CL	20	35	GC	A-6	M	SH	VFR	6.6-7.2		
16+	R										

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-4	0.6-2.0	.03-.04		LOW	.32	1	D	NONE	—	—	>5.0	—	—
4-8	0.6-2.0	.11-.13		LOW									
8-16	0.2-0.6	.11-.13		MODERATE									
16+													

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	CEMENTED PAN OR BEDROCK HARDNESS
5	MOD.-HIGH	MODERATE	MODERATE	LOW				

3.31 NONCONTRASTINO INCLUDEO SOILS WITH 3.30: Footnotes:

4.00 ABBREVIATIONS USED PAOE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.)
W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE

G	Gravel
SG	Sandy gravel
S	Sand
COS	Coarse sand
FS	Fine sand
VFS	Very fine sand
LCOS	Loamy coarse sand
LS	Loamy sand
LFS	Loamy fine sand
LVFS	Loamy very fine sand
COSL	Coarse sandy loam
LS	Sandy loam
FSL	Fine Sandy Loam
VFSL	Very fine sandy loam
SIC	Silty Clay
C	Clay
SICL	Silty clay loam
CL	Clay loam
L	Loam
SIL	Silt loam
SCL	Sandy clay loam
UWB	Unweathered bedrock
WB	Weathered bedrock

HORIZON TEXTURE MODIFIERS

CB	Cobbly
CBA	Angular Cobbly
CBV	Very cobbly
FL	Flaggy
GR	Gravelly
GRC	Coarse gravelly
GRF	Fine gravelly
GRV	Very gravelly
SR	Stratified
ST	Stony
STV	Very stony
STX	Extremely stony

STRUCTURE

SG	Single grain
1	Weak
2	Moderate
3	Strong
VF	Very fine
F	Fine
M	Medium
C	Coarse
VC	Very coarse
GR	Granular
CR	Crumb
PL	Platy
PR	Prismatic
ABK	Angular blocky
SBK	Subangular blocky
M	Massive

CONSISTENCE

Dry:

LO	Loose
SO	Soft
SH	Slightly hard
H	Hard
VH	Very hard
EH	Extremely hard

Moist:

LO	Loose
VFR	Very friable
FR	Friable
FI	Firm
VFI	Very firm
EFI	Extremely firm

SOIL MAP UNIT INTERPRETATION - ORDER - 3

USDA-SCS

SOIL MAP UNIT SYMBOL AND NAME: 213 - Segura-Punchbowl-Locane Association

PRESENT MAJOR LAND USES: Range

POTENTIAL FORESEEABLE USES: see below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR. / NIRR.	7s	7s	7s	7s	7s	4e
SUITABILITY FOR RANGE SEEDING	VERY POOR - ROOT ZONE, AVAILABLE WATER C.	VERY POOR - ROOT ZONE, AWC	VERY POOR - ROOT ZONE AWC, COARSE FRAGMENTS	VERY POOR - ROOT ZONE	VERY POOR - ROOT ZONE	POOR - PRECIPITATION
Shallow Excavations	SEVERE - DEPTH TO ROCK 15-30%; SEV. - D.T.R., SLOPE	SEVERE - DEPTH TO ROCK 15-30%; SEV. - SLOPE, D.T.R.	SEVERE - DEPTH TO ROCK 15-30%; SEV. - D.T.R., SLOPE	SEVERE - CEMENTED PAN	SEVERE - CEMENTED PAN	SLIGHT
Local Roads + Streets	SEVERE - DEPTH TO ROCK 15-30%; SEV. - SLOPE, D.T.R.	SEVERE - DEPTH TO ROCK, LOW S. 15-30% - SEV. - SLOPE, D.T.R, L.S.	SEVERE - LOW STRENGTH, D.T.R 15-30%; SEV. - SLOPE, L.S., D.T.R	SEVERE - CEMENTED PAN, LOW STRENGTH	SEVERE - CEMENTED PAN	MODERATE - FLOODS LOW STRENGTH, FROST ACTION
Roadfill	POOR - AREA RECLAIM 25-30%; POOR - A.R., SLOPE	POOR - AREA RECLAIM LOW STRENGTH, THIN LAYER	POOR - DEPTH TO ROCK, LOW ST. 25-30%; POOR - SLOPE, D.T.R, L.S.	POOR - THIN LAYER, LOW STRENGTH	POOR - THIN LAYER	FAIR - LOW STRENGTH
Sand	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES
Gravel	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES
Pond Reservoir Areas	SEVERE - DEPTH TO ROCK 8-30%; SEV. SLOPE, D.T.R.	SEVERE - DEPTH TO ROCK 8-30%; SEV. - D.T.R., SLOPE	SEVERE - DEPTH TO ROCK 8-30%; SEV. - DEPTH T.R. SLOPE	SEVERE - CEMENTED PAN 8-15; SEV - SLOPE, CEM. PAN	SEVERE - CEMENTED PAN 8-15%; SEVERE - CEMENTED PAN, SLOPE	3-8%; MODERATE SLOPE
Embankments, Dikes + Leeves	SEVERE - THIN LAYER	SEVERE - THIN LAYER	SEVERE - THIN LAYER	SEVERE - THIN LAYER, PIPING	SEVERE - THIN LAYER, PIPING	SEVERE - PIPING

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX	SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE WILD HERB PLANTS	CONIFEROUS PLANTS	SHRUBS
2.10 Segura		Utah Juniper, Pinyon Pine		POOR	POOR	POOR
2.20 Punchbowl, moist		Utah Juniper		POOR	POOR	POOR
2.30 Locane, dry		"		FAIR		FAIR
2.40 Fishlake				FAIR		FAIR
2.50 Umil				POOR		POOR
2.60 Xeric Torriorthents, coarse-loamy, mixed/calcareous), frigid, flooded				GOOD		GOOD

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS 2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
basin wildrye	ELCI2	0-5	1-5	1-5	2-5	2-5	5-15
bluebunch wheatgrass	AGSP	10-15	5-10	5-10	5-10	5-10	1-5
blue grama	BOGR2	1-5	1-5	1-5	1-5	1-5	1-5
bottle brush Squirreltail	SI HY	-	1-5	1-5	1-5	1-5	1-5
galleta	HIJA	-	1-5	1-5	1-5	1-5	-
Indian rice grass	ORHY	1-5	5-10	5-10	5-10	5-10	1-5
Needle and Thread	STCO4	-	5-10	5-10	2-5	2-5	2-5
Sand dropseed	SPCR	-	-	-	1-5	1-5	1-5
Sandberg bluegrass	POSE	0-5	1-5	1-5	1-5	1-5	1-5
Thickspike wheatgrass	AGDA	-	-	-	-	-	-
western wheatgrass	AGSM	2-5	-	-	1-5	1-5	-
buckwheat	ERIOG	1-2	1-2	1-2	-	-	-
Globemallow	SPHAE	-	1-2	1-2	1-2	1-2	1-2
penstemon	PENST	1-2	1-2	1-2	1-2	1-2	1-2
princes plume	STANL	-	1-2	1-2	1-2	1-2	1-2
black sagebrush	ARNO4	1-2	20-30	20-30	20-30	20-30	-
bud sagebrush	ARSPS	-	5-10	5-10	?	?	-
cacti		-	1-2	1-2	1-2	1-2	1-5
ephedra	EPHED	1-2	1-2	1-2	1-2	1-2	2-5
Fourwing saltbush	ATCA2	-	2-5	2-5	1-2	1-2	2-5
Little leaf horse brush	TEGL	-	1-2	1-2	1-2	1-2	-
Wyoming big sagebrush	ARTRW	10-15	1-2	1-2	1-2	1-2	5-7
Small rabbitbrush	CHVI8	-	2-5	2-5	2-5	2-5	-
Spiny hopsage	GRSP	-	1-2	1-2	-	-	1-5
Shadscale	ATCO	-	1-2	1-2	1-2	1-2	-
Yucca	YUCCA	-	1-2	1-2	-	-	-
Green rabbitbrush	CHVI9	-	-	-	-	-	5-10
Basin big sage brush	ARTRT	-	-	-	-	-	5-7
milkvetch	ASTRA	1-2	-	-	1-2	1-2	-
phlox			1-2	1-2	1-2	1-2	-
RANGE SITE NAME OR NUMBER		P/J big sage	Juniper Savannah	Shallow loamy F-12"	Shallow loamy F-12"	Shallow loamy F-12"	Wash 5-12"
POTENTIAL PRODUCTION LBS. AC. DRY WT. FAVORABLE YEARS		900	500	650	650	650	700
NORMAL YEARS		600	300	350	350	250	500
UNFAVORABLE YEARS		300	250	175	175	125	300

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2: The "Locane" Douglas rabbitbrush, mountain mahogany, bitter brush & cliffrose and others in P/J woodland, include Wyo. big sage brush in Nv. Dep. II.

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY 241

USDA-BOR

rev 10/5/79 K

SOIL SURVEY AREA: Nyc 'o. - Sevenmile Wash Area MLRA: 28 DATE: 8/14/79 BY: RAK

Revised 1/30/80 PLS, DMS

SOIL MAP UNIT SYMBOL AND NAME: 241 - Usine, - Fishlake - Unil Association

1.00 SETTING Dissected aged eroding terrace edge near main drainages as many remnants of the terrace. AHP 8", AAAT: 50°F, cFF 75days, Elev. 6800± most of the ppt falls in winter and spring, summers are warm & dry. Vegetation is sparse shrubs.

2.00 MAP UNIT COMPOSITION

	MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10	Usine gravelly loam, 15 to 30 percent slopes - Sandy-skeletal, mixed, frigid Xeric Torriorthents	40	Across steep terrace breaks to foot slope, mixed, 15-30% slopes, convex, in old alluvium	Black Sage, Indian Ricegrass
2.20	Fishlake sandy loam, 2 to 8 percent slopes - Loamy, mixed, frigid shallow Xerollic Durargids	25	Interfluves, footslopes, outwash fans from Old terrace, 2 to 8% slopes, smooth & concave in old alluvium	Black Sage, Indian Ricegrass, Wyoming Big Sagebrush, Bitterbrush, Rabbit brush, Cheatgrass
2.30	Umil loam, 2 to 8 percent slopes - Loamy, mixed, frigid shallow Xerollic Durorthids	25	Tops of remnants, gentle side slopes, mixed, 2-8% slopes, convex & smooth in old alluvium	Black sage, Rabbit brush, Cheatgrass

	CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40	Pedoli sandy loam, 2 to 8 percent slopes - Fine-loamy, mixed, frigid Xerollic Haplargids	5	5	2	Interfluves, outwash fans from terrace 2-8% slopes	Very loam BT, deep
2.50	- Coarse-loamy, mixed (calcareous), frigid Xeric Torriorthents	5	5	2	Footslopes 2-15% slopes	Own 40" dup, coarse loamy
2.60						

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Usine gravelly loam, 15 to 30 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-3	GR-L	0	20	ML	A-4	1,M,PL	SO	VFR	7.9-8.4		
3-60	GRV-S	10-30	40-50	SW-SM	A-1-b	M	LO	LO	7.9-8.4		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-3	0.6-2.0	.13-.15		LOW	.43	5	A	NONE	-	-	>5.0	-	-
3-60	6.0-20	.03		LOW									

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
4L	HIGH	MODERATE	HIGH	LOW	LOW	>60	-	-

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10:

3.20 MAJOR COMPONENT NAME: Fishlake sandy loam, 2 to 8 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-5	SL	0	0	SM	A-4, A-2-4	1,G,PL	SO	VFR	6.6-7.3		
5-10	CL	0	0	ML, CL	A-6, A-4	2,M,SBK	SH	VFR	6.6-7.3		
10-18	L	0	0	ML,CL,CL-ML	A-6, A-4	2,M,SBK	SH	VFR	7.4-7.8		
18+	JND					M	EH	EFI	7.9-8.4		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-5	2.0-6.0	.14-.16		LOW	.32	1	D	NONE	-	-	>5.0	-	-
5-10	0.2-0.6	.14-.21		MODERATE									
10-18	0.6-2.0	.16-.18		MODERATE									
18+													

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
3	LOW-MODERATE	HIGH	MODERATE	LOW	MODERATE	10-20	THICK	-

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20: Xerollic Durargids, fine-loamy, mixed, frigid 2-8% slopes

3.30 MAJOR COMPONENT NAME: Umil loam, 2 to 8 percent slopes.

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-3	L	0	0	ML	A-4	2,M,PL	SH	FR	7.9-9.0		
3-6	L	0	15	CL-ML, ML	A-4	1,F,GR	SH	FR	7.9-9.0		
6-13	GR-L	20	10	CL-ML, ML	A-4	M	SH	FR	7.9-9.0		
13+	JHD					M	EH	EFI			

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-3	0.6-2.0	.16-.18		LOW	.37	1	D	NONE	-	-	>5.0	-	-
3-6	0.6-2.0	.14-.16		LOW									
6-13	0.6-2.0	.13-.15		LOW									
13+													

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
4L	LOW-HIGH	MODERATE	LOW	LOW	MODERATE	10-18	THICK	-

3.31 NONCONTRASTING INCLUDED SOILS WITH 3.30: Xerollic Durargids, fine-loamy, mixed, frigid

Footnotes

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.)
W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE

G	Gravel
SG	Sandy gravel
S	Sand
COS	Coarse sand
FS	Fine sand
VFS	Very fine sand
LCOS	Loamy coarse sand
LS	Loamy sand
LFS	Loamy fine sand
LVFS	Loamy very fine sand
COSL	Coarse sandy loam
SL	Sandy loam
FSL	Fine Sandy Loam
VFSL	Very fine sandy loam
SIC	Silty Clay
C	Clay
SICL	Silty clay loam
CL	Clay loam
L	Loam
SIL	Silt loam
SCL	Sandy clay loam
UWB	Unweathered bedrock
WB	Weathered bedrock

HORIZON TEXTURE MODIFIERS

CB	Cobbly
CBA	Angular Cobbly
CBV	Very cobbly
FL	Flaggy
GR	Gravelly
GRC	Coarse gravelly
GRF	Fine gravelly
GRV	Very gravelly
ST	Stratified
ST	Stony
STV	Very stony
STE	Extremely stony

STRUCTURE

SG	Single grain
1	Weak
2	Moderate
3	Strong
VF	Very fine
F	Fine
M	Medium
C	Coarse
VC	Very coarse
GR	Granular
CR	Crumb
PL	Platy
PR	Prismatic
ABK	Angular blocky
SBK	Subangular blocky
M	Massive

CONSISTENCE

Dry:

LO	Loose
SO	Soft
SH	Slightly hard
H	Hard
VH	Very hard
EH	Extremely hard

Moist:

LO	Loose
VFR	Very friable
FR	Friable
FI	Firm
VFI	Very firm
EFI	Extremely firm

142

SOIL MAP UNIT INTERPRETATION - ORDER - 3

USDA-SCS

SOIL MAP UNIT SYMBOL AND NAME: 241- Usine - Fishlake - Umil Association

PRESENT MAJOR LAND USES: Range

POTENTIAL FORESEEABLE USES: see below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND DR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR.		7S		4c	4e	
NIRR.	7S	VERY POOR - ROOT ZONE	7S			
SUITABILITY FOR RANGE SEEDING	VERY POOR - DEPTH TO SAND + GRAVEL, AWC	SEVERE - CEMENTED PAN	VERY POOR - ROOT ZONE, SEVERE - CEMENTED PAN	POOR - PRECIPITATION	POOR - PPT.	
Shallow Excavation	SEVERE: CUTBANKS CAVE			SEVERE - CUTBANKS CAVE	MODERATE - SLOPE	
Local Roads & Streets	15-30%: SEV-SLOPE, C.C.	SEVERE - CEMENTED PAN, LOW STRENGTH	SEVERE - CEMENTED PAN	SEVERE - LOW STRENGTH	MODERATE - FLOODS, LOW STRENGTH, FROST A	
Roadfill	15-30%: SEVERE - SLOPE	POOR - THIN LAYER, LOW STRENGTH	POOR - THIN LAYER	FAIR - LOW STRENGTH	FAIR - LOW STRENGTH	
Sand	PROBABLE	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES	
Gravel	PROBABLE	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES	
Pond Reservoir Area	SEVERE - SEEPAGE	SEVERE - THIN LAYER, PIPING	SEVERE - CEMENTED PAN	SEVERE - SEEPAGE	4-15%: SEVERE - SLOPE	
	15-30%: SEV.-SLOPE, SEEP.		SEVERE - THIN LAYER, PIPING	SEVERE - THIN LAYER PIPING	SEVERE - PIPING	
Embankments, Dikes, Leeves	SEVERE - SEEPAGE					

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY			SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE	
	ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX	WILD HERB PLANTS	SHRUBS
2.10 Usine		NONE		POOR	POOR
2.20 Fishlake		NONE		FAIR	FAIR
2.30 Umil		NONE		POOR	POOR
2.40 Pedoli		NONE		GOOD	GOOD
2.50 Coarse-loamy, mixed, frigid Xeric Torriorthents, 2 to 15% slopes		NONE		FAIR	FAIR
2.60					

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS					
		2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
Indian ricegrass	ORHY	12			12	12	
Needleandthread	STCOA	8	10	10	7	7	
Bottlebrush squirreltail	SIHY	2			3	3	
Fine bluegrass	POSC	6	6	6	4	7	
bluebunch wheatgrass	AGSP		2	2			
galleta	HIJA				2	2	
Sandberg bluegrass	POSE				2	2	
Thurber needlegrass	STTHZ				4	4	
		2					
Other grasses	PPGG		10	10			
Forbs	PPFF	15	15	15		15	
Wyoming big sagebrush	ARTRW				25	25	
Spiny hopsage	GRSP				4	4	
Nevada ephedra	EPNE				2	2	
Spineless horsebrush	TECAV				2	2	
winterfat	EULAS	7			2	2	
black sagebrush	ARARN	20	25	25			
fourwing saltbush	ATCAZ	5	3	3			
Bud sagebrush	ARSPS	3		7	8	8	
Ephedra	EPHED	5					
Douglas rabbitbrush	CHVI8	2	7	2	2	2	
Other shrubs	SSSS	15	6	6			
RANGE SITE NAME OR NUMBER		Shallow hill 8-12"	Shallow loamy 8-12"	Shallow loamy 8-12"	Loamy 8-10"	Loamy 8-10"	
POTENTIAL PRODUCTION LBS. AC. DRY WT. FAVORABLE YEARS		500	650	650	800	800	
NORMAL YEARS		270	350	350			
UNFAVORABLE YEARS		145	175	175	400	400	

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2:

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY

261

USDA-SCS

SOIL SURVEY AREA: NYE CO Sevenmile Wash MLRA: 28 DATE: 8/16/77 BY: JM Bradak
Rev: 2/4/80 OMS

SOIL MAP UNIT SYMBOL AND NAME: 261 Shipley loam, 0-4% slopes

1.00 SETTING Nearly level broad flood plains and overplaced fans
AAP 8", MAT 46°F, FFS 75 Days Elevation 6600-7600'; most ppt. falls in winter + spring

2.00 MAP UNIT COMPOSITION

MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10 Shipley Coarse-Loamy, mixed (calcareous), frigid Xeric Torriorthents	90	Nearly level broad drainage area formed by recent alluvial material, 0-4% slopes	Winterfat with Basin Big Sagebrush along channels.
2.20			
2.30			

CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40 Fencemile loam, 0 to 2 percent slopes Coarse-loamy, mixed, frigid TorriFluventic Haploxerolls	5	0.5	3	Nearly level linear bodies along the main channel of drainage area, 0-2% slopes	Mollic epipedon, Basin big sagebrush
2.50 Applecross sandy loam, 0 to 4 percent slopes Coarse-loamy, mixed, frigid Xerollic Camborthids	5	1	3	Slightly elongated patches in the overplaced fans, 0-4% slopes	Cambic horizon
2.60					

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Shipley

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-6		0	0	SM, SM-SC	A-4	2,F,PL M	SH	FR	7.9-8.4		
6-60	S.L	0	0	SM, SM-SC	A-4		SH	FR	8.5-9.0		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTH
0-6	0.6-2.0	.15-.17		LOW	.37	5		Occasional	V. BRIEF	MAR-MAY	>6.0	—	—
6-60	0.6-2.0	.19-.21		LOW									

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
4	LOW-MOD.	MODERATE	HIGH	LOW	MODERATE	>60	—	—

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10:

3.20 MAJOR COMPONENT NAME:

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20:

3.30 MAJOR COMPONENT NAME:

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS

3.31 NONCONTRASTING INCLUDED SOILS WITH 3.30: Footnotes

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.)
W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE

G	Gravel
SG	Sandy gravel
S	Sand
COS	Coarse sand
FS	Fine sand
VFS	Very fine sand
LCOS	Loamy coarse sand
LS	Loamy sand
LFS	Loamy fine sand
LVFS	Loamy very fine sand
COSL	Coarse sandy loam
SL	Sandy loam
FSL	Fine Sandy Loam
VFSL	Very fine sandy loam
SIC	Silty Clay
C	Clay
SICL	Silty clay loam
CL	Clay loam
L	Loam
SIL	Silt loam
SCL	Sandy clay loam
UWB	Unweathered bedrock
WB	Weathered bedrock

HORIZON TEXTURE MODIFIERS

CB	Cobbly
CBA	Angular Cobbly
CBV	Very cobbly
FL	Flaggy
GR	Gravelly
GRC	Coarse gravelly
GRF	Fine gravelly
GRV	Very gravelly
SR	Stratified
ST	Stony
STV	Very stony
STX	Extremely stony

STRUCTURE

SG	Single grain
1	Weak
2	Moderate
3	Strong
VF	Very fine
F	Fine
M	Medium
C	Coarse
VC	Very coarse
GR	Granular
CB	Crumb
PL	Platy
PR	Prismatic
ABK	Angular blocky
SBK	Subangular blocky
M	Massive

CONSISTENCE

Dry:

LO	Loose
SO	Soft
SH	Slightly hard
H	Hard
VH	Very hard
EH	Extremely hard

Moist:

LO	Loose
VFR	Very friable
FR	Friable
FI	Firm
VFI	Very firm
EFI	Extremely firm

132

SOIL MAP UNIT INTERPRETATION - ORDER - 3

USDA-SCS

SOIL MAP UNIT SYMBOL AND NAME: 261- Shipley loam, 0-4% slopes

PRESENT MAJOR LAND USES: range

POTENTIAL FORESEEABLE USES: See below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR.	3c			4e	6c	
NIRR.						
SUITABILITY FOR RANGE SEEDING	FAIR PRECIPITATION			FAIR(1) - PRECIPITATION	POOR - PRECIPITATION	
Shallow Excavation	SLIGHT			MODERATE - FLOODS	SEVERE - CUTBANKS CAVE	
local Roads + Streets	MODERATE - FLOODS LOW STRENGTH, FROST ACTION			SEVERE - FLOODS	MODERATE - FROST ACTION	
Roadfill	FAIR - LOW STRENGTH			FAIR - LOW STRENGTH THIN LAYER	GOOD	
Sand	IMPROBABLE - EXCESS FINES			IMPROBABLE - EXCESS FINES	PROBABLE	
Gravel	IMPROBABLE - EXCESS FINES			IMPROBABLE - EXCESS FINES	PROBABLE	
Pond Reservoir Area	3-4% : MODERATE - SLOPE			SEVERE - SEEPAGE	SEVERE - SEEPAGE	
Embankments, Dikes, Levees	SEVERE - PIPING			SEVERE - PIPING.	MODERATE - PIPING, SEEPAGE	

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX	SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE: Grain + Seed Crop	Dom. Grasses + Leg.	Herb pits		Shrubs	
2.10 Shipley		NONE		Fair	Fair	Fair		Fair	
2.20									
2.30									
2.40 Sevenmile		NONE		Poor	Fair	Fair		Fair	
2.50 Appkbush		NONE				Fair		Fair	
2.60									

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS: 2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
- Sedges	CAREX	-			See footnote	-	
basin wildrye	ELCI	1-2				-	
bluebunch wheatgrass	AGSP	2-5				5-12	
blue grama	BOGR2	-				1-5	
bottle-brush Squirreltail	SIHY	2-5				1-5	
galleta	HIJA	1-2				1-5	
Indian rice grass	ORHY	10-15				5-10	
needle and thread	STCO4	5-10			5	5-10	
Sandberg bluegrass	POSE	1-2				-	
Sand dropseed	SPCR	1-2				1-5	
Western wheatgrass	AGSM	1-2				-	
Nevada bluegrass	PONE	-				1-2	
buckwheat	ERIOG	1-2				-	
Globemallow	SPHAE	1-2				-	
baltic rush	JUBA	-				-	
penstemon	PENST	1-2				1-2	
phlox	PHLOX	1-2				1-2	
Princes plume	STANL	-				1-2	
native annuals	ANNF	1-2				-	
SPINY hopsage	GRSP	1-2				2-5	
Willow	SALIX	-				-	
Small rabbitbrush	CHNIS	1-2				1-2	
Basin big sage	ARTRT	-			10	-	
Wyoming big sage	ARTRW	1-2			5	15-25	
black sage brush	ARNON	1-2				-	
bud sage-brush	ARSPS	5-10				1-2	
Cacti		1-2					
Ephedra	EPHED	1-2				2-5	
Sourwing saltbush	ATCA2	0-5			5	5-10	
Winterfat	EULAS	25-40				-	
RANGE SITE NAME OR NUMBER		NV-D28-13 JA			Wash 5-12"	Loamy 8-10"	
POTENTIAL PRODUCTION LBS. AC. DRY WT. FAVORABLE YEARS		500			700	800	
NORMAL YEARS		300			500		
UNFAVORABLE YEARS		150			300	(SPAI) 400	

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2: 2:40 alkali sacaton SPAI 5%; other grasses 20%; forbs PFFF 15%; green rabbitbrush CHVI5G 10%; other shrubs 5555 5%.

281

USDA-SCS

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY

SOIL SURVEY AREA: NYE CO Sevenmile Wash - Antelope Valley MLRA: 28 DATE: 10/15/79 BY: GAK

SOIL MAP UNIT SYMBOL AND NAME: 281 Dobrow loam, 2-4% slopes Rev. 1/30/80 PLS, DMS

1.00 SETTING Small gently sloping moderately well drained mountain meadows AAP-16", AAAT 45°F, FFS <90 days, Elev. 9000-1000 most ppt. falls in winter & spring

2.00 MAP UNIT COMPOSITION — MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10 Dobrow loam, 2 to 4 percent slopes -coarse-loamy, mixed Cumulic Cryaquolls	91	Lw Alluvium from Rhyolite, small gently sloping moderately well drained valley fills, 2-4%	Silver sage, wild rose, pinetin, grasses.
2.20			
2.30			

CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40 Loamy-Skeletal mixed Typic Cryaquolls	9	1	5	Near center of the drainageway on valley fill, 2-4% slopes	Skeletal
2.50					
2.60					

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Dobrow loam, 2 to 4 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-17	L	0	0-10	CL-ML	A-4	M	VH	FR	6.6-7.4		
17-40	SL	0	0	SM, SM-SC	A-4, A-2-4	M	SH	VFR	6.6-7.4		
40-44	SC	0	0	CL-ML	A-6, A-1-6	M	VH	FR	6.6-7.4		
44-60	GR-LS	0	30	SM	A-1-b	M	LO	LO	6.6-7.4		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTH
0-17	0.6-2.0	.16-.18		LOW	.37	1	D	FREQUENT	LONG	MAR-JUL	>5.0	-	-
17-40	2.0-6.0	.11-.13		LOW									
40-44	.06-0.2	.15-.17		MOD.-HIGH									
44-60	6.0-20	.06-.08		LOW									

EROSION HAZARD WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK THICKNESS	CEMENTED PAN OR BEDROCK HARDNESS
5	LOW-MOD.	MODERATE	HIGH	LOW	HIGH	>60	-	-

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10:

3.20 MAJOR COMPONENT NAME:

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS

EROSION HAZARD WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK THICKNESS	CEMENTED PAN OR BEDROCK HARDNESS

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20:

3.30 MAJOR COMPONENT NAME:

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS

EROSION HAZARD WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK THICKNESS	CEMENTED PAN OR BEDROCK HARDNESS

3.31 NONCONTRASTING INCLUDED SOILS WITH 3.30: Footnotes

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.)
W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE

G	Gravel
SG	Sandy gravel
S	Sand
COS	Coarse Sand
FS	Fine sand
VFS	Very fine sand
LCOS	Loamy coarse sand
LS	Loamy sand
LFS	Loamy fine sand
LVFS	Loamy very fine sand
COSL	Coarse sandy loam
LS	Sandy loam
FSL	Fine Sandy Loam
VFSL	Very fine sandy loam
SIC	Silty Clay
C	Clay
SICL	Silty clay loam
CL	Clay loam
L	Loam
SIL	Silt loam
SCL	Sandy clay loam
UWB	Unweathered bedrock
WB	Weathered bedrock

HORIZON TEXTURE MODIFIERS

CB	Cobbly
CBA	Angular Cobbly
CBV	Very cobbly
FL	Flaggy
GR	Gravelly
GRC	Coarse gravelly
GRF	Fine gravelly
GRV	Very gravelly
ER	Stratified
ST	Stony
STV	Very stony
STE	Extremely stony

STRUCTURE

SG	Single grain
1	Weak
2	Moderate
3	Strong
VF	Very fine
F	Fine
M	Medium
C	Coarse
VC	Very coarse
GR	Granular
CR	Crumb
PL	Platy
PR	Prismatic
ABK	Angular blocky
SBK	Subangular blocky
M	Massive

CONSISTENCE

Dry:

LO	Loose
SO	Soft
SH	Slightly hard
H	Hard
VH	Very hard
EH	Extremely hard

Moist:

LO	Loose
VFR	Very friable
FR	Friable
FI	Firm
VFI	Very firm
EFI	Extremely firm

281

182

SOIL MAP UNIT INTERPRETATION - ORDER - 3

USDA-SCS

SOIL MAP UNIT SYMBOL AND NAME: 281 - Dodrow [illegible] loam, 2-4% slopes
PRESENT MAJOR LAND USES: Grazing - Wildlife + Domestic
POTENTIAL FORESEEABLE USES: See below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR. / NIRR.	4W			6W		
SUITABILITY FOR RANGE SEEDING	GOOD *					
Shallow Excavations	SEVERE - CUTBANKS CAVE					
Local Roads + Streets	SEVERE - FLOODS, FROST ACTION					
Roadfill	GOOD					
Sand	IMPROBABLE - EXCESS FINES					
Gravel	IMPROBABLE - EXCESS FINES					
Pond Reservoir Area	SEVERE - SEEPAGE					
Embankments, Dikes, Leeves	SEVERE - SEEPAGE					

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY			SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE					
	ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX	Grain + Seed Crop	Dom. Grasses + Veg	Herb. Plts		Shrubs	Wetl. Plts	Shall Water
				Fair	Fair	Good		Poor	Fair	Poor
2.10 Dobrow		NONE								
2.20										
2.30										
2.40 Loamy-skeletal, mixed Typic Cryaquolls		NONE				Good		Poor	FAIR	POOR
2.50										
2.60										

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS					
		2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
western wheatgrass	AGSM	15			15		
thickspike wheatgrass	AGDA				10		
Creeping wildrye	ELTR3	10			8		
Baltic rush	JUBA	8			2		
other perennial grasses	PPGG	2			5		
blue grasses	POA	5			20		
other perennial forbs	PPFF	20					
other annual forbs	AAFF				15		
Silver sagebrush	ARCA13	15					
rubber rabbitbrush	CHNA	5					
other shrubs	SSSS	10			10		
RANGE SITE NAME OR NUMBER		wet meadow 9-25"			wet meadow 12-35"		
POTENTIAL PRODUCTION LBS. AC. DRY WT. - FAVORABLE YEARS							
POTENTIAL PRODUCTION LBS. AC. DRY WT. - NORMAL YEARS							
POTENTIAL PRODUCTION LBS. AC. DRY WT. - UNFAVORABLE YEARS							

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2:

19714

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY

291

USDA-SCS

SOIL SURVEY AREA: Nye Co. - Sovenmile Wash MLRA: 28 DATE: BY:

SOIL MAP UNIT SYMBOL AND NAME: Bucon Variant - Locane - Segura Association - 291 Rev. 1/30/80 PLS, DMS

1.00 SETTING Hills + Mountains with steep sideslopes + rolling tops where most of the bedrock is rhyolite. AAP - 11 to 16 inches, AAAT - 41 to 47°F, FFS - 80 days, Elev. 6,500' - 8,000', most ppt. falls in winter + spring

2.00 MAP UNIT COMPOSITION

MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10 Bucon Variant stony silty clay loam, 4 to 30 percent slopes - Fine, montmorillonitic, frigid Xerollic Haplargids	40	4-30% slopes, tops of hills; residuum	PIJ woodland - big sagebrush understory
2.20 Locane extremely stony loam, 15 to 50 percent slopes - Clayey-skeletal, montmorillonitic, frigid Lithic Xerollic Haplargids	30	15-50%, sideslopes of hills + mountains; residuum	PIJ woodland - big sagebrush understory, Parish's alkali sagebrush
2.30 Segura extremely stony sandy loam, 15 to 50 percent slopes - Loamy, mixed, frigid Lithic Argixerolls	20	15-50%, sideslope of hills + mountains, residuum	PIJ woodland - w/ big sagebrush understory

CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40 Loamy and Loamy-skeletal, mixed, frigid Lithic Xeric Torriorthents, 8 to 50 percent slopes	6			Random areas within major components, 8-50% slopes	Skeletal and loamy control section, no argillic.
2.50 Rock Outcrop, andesite	2				no soil
2.60 Coarse-loamy, mixed (calcareous), frigid Xeric Torriorthents and Xerollic Camborthids	2			Narrow drainways, 2 to 8 percent slopes	Coarse-loamy control section, occasional flooding

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Bucon Variant stony silty clay loam, 4 to 30 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-4	SiT-SiCL	5-25		CL	A-6	weak, thin, platy	slightly hard	very friable	6.8	-	-
4-14	C	0-10		CH	A-7	strong, med. prismatic	very hard	firm	7.0	-	-
14-26	SCL	25-35		CL	A-7	m	hard	friable	8.6	-	-
26+	UWB										

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-4	0.2-0.6	.18-.20		LOW	.37	4	C	NONE	-	-	-	-	-
4-14	.06-.2	.14-.16		HIGH	.24								
14-26	.2-.6	.18-.20		HIGH	.24								
26+					WIND EROD. GRP. 4L	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK THICKNESS	CEMENTED PAN OR BEDROCK HARDNESS
						MOD-HIGH	MODER.	HIGH	LOW	MODERATE	20-40	-	HARD

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10: Xerollic H[illegible]ids, fine-loamy, mixed frigid; [illegible]ide, loamy-skeletal, mixed, frigid.

3.20 MAJOR COMPONENT NAME: Locane extremely stony loam, 15 to 50 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED GC	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-4	STX-L	71	85	GW-GM, GP-GC, GM-GC,	A-2-4	1, M, SBK	SO	FR	7.4-7.8		
4-8	CBV-SIL	20	35	CL-ML, ML	A-4		H	FI	6.6-7.2		
8-16	CBV-CL	20	35	GC	A-6	M	SH	VFR	6.6-7.2		
16+	R										

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-4	0.6-2.0	.03-.04		LOW	.32	1	D	NONE	-	-	>5.0	-	-
4-8	0.6-2.0	.11-.13		LOW									
8-16	0.2-0.6	.11-.13		MODERATE	WIND EROD. GRP. 5	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK THICKNESS	CEMENTED PAN OR BEDROCK HARDNESS
16+						HIGH	MODERATE	MODERATE	LOW	LOW	10-20	-	HARD

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20: Lithic Xerollic Haplargids, loamy and loamy-skeletal, mixed, frigid

3.30 MAJOR COMPONENT NAME: Segura extremely stony sandy loam, 15 to 50 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-3	STX-SL	15	10	SM, SM-SC	A-2-4	2, M, GR	LO	VFR	7.9-8.4		
3-7	SCL	0	15	SM-SC, SC	A-4, A-6	2, M, SBK	SH	FI	7.9-8.4		
7-10	GR-SL	0	45	GM-SM, SM-SC, GM-GC	A-2-4	3, M, SBK	SH	FI	7.9-8.4		
10+	R										

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-3	2.0-6.0	.09-.11		LOW	.20	1	D	NONE	-	-	>5.0	-	-
3-7	0.2-0.6	.15-.17		MODERATE									
7-10	2.0-6.0	.07-.08		LOW	WIND EROD. GRP. 3	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK THICKNESS	CEMENTED PAN OR BEDROCK HARDNESS
10+						MOD.-HIGH	HIGH	LOW	LOW	MODERATE	10-20	-	HARD

3.31 NONCONTRASTING INCLUDED SOILS WITH 3.30: Pernty soils

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.)
W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE

G	Gravel
SG	Sandy gravel
S	Sand
COS	Coarse sand
FS	Fine sand
VFS	Very fine sand
LCOS	Loamy coarse sand
LS	Loamy sand
LFS	Loamy fine sand
LVFS	Loamy very fine sand
COSL	Coarse sandy loam
SL	Sandy loam
FSL	Fine sandy loam
VFSL	Very fine sandy loam
SIC	Silty clay
C	Clay
SICL	Silty clay loam
CL	Clay loam
L	Loam
SIL	Silt loam
SCL	Sandy clay loam
UWB	Unweathered bedrock
WB	Weathered bedrock

HORIZON TEXTURE MODIFIERS

CB	Cobbly
CBA	Angular Cobbly
CBV	Very cobbly
FL	Flaggy
GR	Gravelly
GRC	Coarse gravelly
GRF	Fine gravelly
GRV	Very gravelly
SR	Stratified
ST	Stony
STV	Very stony
STX	Extremely stony

STRUCTURE

SG	Single grain
1	Weak
2	Moderate
3	Strong
VF	Very fine
F	Fine
M	Medium
C	Coarse
VC	Very coarse
GR	Granular
CR	Crumb
PL	Platy
PR	Prismatic
ABK	Angular blocky
SBK	Subangular blocky
M	Massive

CONSISTENCE

Dry:

LO	Loose
SO	Soft
SH	Slightly hard
H	Hard
VH	Very hard
EH	Extremely hard

Moist:

LO	Loose
VFR	Very friable
FR	Friable
FI	Firm
VFI	Very firm
EFI	Extremely firm

SOIL MAP UNIT INTERPRETATION - ORDER - 3

USDA-SCS

SOIL MAP UNIT SYMBOL AND NAME: 291 - Bucan Variant - Locane Segura Association

PRESENT MAJOR LAND USES: Range

POTENTIAL FORESEEABLE USES: See below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR.						
NIRR.	7S	7S	7S	6S	8	6S
SUITABILITY FOR RANGE SEEDING	POOR - PRECIPITATION	VERY ROCK - ROOT ZONE, AWC, COARSE FRAGMENTS	VERY ROCK - ROOT ZONE, AWC 30-50%: V. POOR - SLOPE, R.Z, AWC			
Shallow Excavation	15-30%: SEVERE - SLOPE	SEVERE - DEPTH TO ROCK 15-50%: SEV. - D.T.R., SLOPE	SEVERE - DEPTH TO ROCK 15-50%: SEV. - SLOPE, D.T.R.			
Local Roads + Streets	15-30%: SEVERE - SLOPE	SEVERE - LOW STRENGTH, D.T.R 15-50% SEV. - SLOPE, L.S., D.T.R	SEVERE - DEPTH TO ROCK 15-50%: SEV - SLOPE, D.T.R.			
Roadfill	25-30%: SEVERE - SLOPE	POOR - DEPTH TO ROCK, LOW ST. 25-50% ROCK - SLOPE, D.T.R, L.S.	POOR - ARA REC., LOW ST, THIN L. 25-50% ROCK - SLOPE, A.R., L.S., T.L.			
Sand	IMPROBABLE - EXCESS FINES	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER			
Gravel	IMPROBABLE - EXCESS FINES.	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER			
Pond Reservoir Area	8-30%: SEVERE - SLOPE	SEVERE - DEPTH TO ROCK 15-50% SEV. - DEPTH T.R, SLOPE	SEVERE - DEPTH TO ROCK 15-50%: SEV. - SLOPE, D.T.R.			
Embankments, Dikes, Levees	MODERATE - THIN LAYER	SEVERE - THIN LAYER	SEVERE - THIN LAYER			

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX	SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE Herb Pts	Con Pts	Hard
2.10 Bucan Variant		Pinyon Pine Utah Juniper		Fair	Poor	Fair
2.20 Locane		Pinyon Pine Utah Juniper		Poor	V. Poor	Poor
2.30 Segura		Pinyon Pine Utah Juniper		Poor	V. Poor	Poor
2.40 Loamy and Loamy Skeletal mixed, frigid Lithic Xeric Torriorthents		Fair Pinyon Pine Fair Utah Juniper		V. Poor	V. Poor	V. Poor
2.50 R.O., andesite				-	-	-
2.60 Coarse - loamy, mixed (calcareous) frigid Xeric Torriorthents		NONE		Poor		

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS					
		2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
Bluebunch wheatgrass	AGSP	10-15	10-15	10-15	1-5		1-5
blue grama	BOGR4	1-5	1-5	1-5	5-10		1-5
basin wildrye	ELCI2	2-5	2-5	2-5	1-5		5-15
Indian rice grass	ORHY	2-5	2-5	2-5	1-5		1-5
mutton grass	POFE	1-5	1-5	1-5	1-5		-
Sandberg bluegrass	POSE	2-5	2-5	2-5	5-10		1-5
Thurbers needlegrass	STTH2	10-15	10-15	10-15	5-10		-
western wheatgrass	AGSM	2-5	2-5	2-5	-		-
Alkali Sacation	SPAI	-	-	-	1-5		5-10
needle and thread	STCO4	-	-		-		2-5
buckwheat	ERIOG	1-2	1-2	1-2	-		-
Indian paintbrush	CASTI2	1-2	1-2	1-2	1-2		-
bluebells	MERTE	1-2	1-2	1-2	1-2		-
Globemallow	SPHAE	-	-	-	1-2		1-2
phlox	PHLOX	1-2	1-2	1-2	1-2		-
penstemon	PENST	1-2	1-2	1-2	20-30		1-2
princes plume	STANL	-	-	-	5-10		1-2
Big sage brush	ARTRW	10-15	10-15	10-15	1-2		5-7
Rabbit brush	CHNA2	0-10	0-10	0-10	1-2		-
Cliffrose	COMI5	0-5	0-5	0-5	2-5		1-5
ephedra	EPHED	1-2	1-2	1-2	1-2		2-5
Green rabbit brush	CHRYS9	-	-	-	1-2		5-10
Fourwing saltbush	ATCA2	-	-	-	2-5		2-5
Basin big sage brush	ARTRT	-	-		1-2		5-7
black sage brush	ARARN	1-2	1-2	1-2	1-2		-
Douglas rabbit brush	CHVI8	1-2	1-2	1-2	1-2		-
mountain mahogany	CELEO	0-5	0-5	0-5	-		-
Service berry	AMELA	1-2	1-2	1-2	1-2		-
rose	ROSA	1-2	1-2	1-2	-		-
currant	RIBES	1-2	1-2	1-2	1-2		-
RANGE SITE NAME OR NUMBER		P/J woodland Big Sage	P/J woodland Big Sage	P/J big sage	Shallow hill R-12"		Wash 5-12"
POTENTIAL PRODUCTION LBS. AC. DRY WT. FAVORABLE YEARS		300-900	300-900	300-900	650		700
NORMAL YEARS		300-900	300-900	300-900	350		400
UNFAVORABLE YEARS		300-900	300-900	300-900	175		300

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2: Include cane cholla, broom snakeweed, bottle brush squirreltail, Indian ricegrass, Utah serviceberry, mountain mahogany, curlleaf mountain mahogany in P/J woodland.

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY

310

USDA-SCS

SOIL SURVEY AREA: NYE CO Sevenmile Wash MLRA: 28 DATE: 1/25/79 BY: RAK

SOIL MAP UNIT SYMBOL AND NAME: 310 - Shreek - Vinini Rev. 11/30/81 PTS, LMS

1.00 SETTING Old Dissected Terrace with narrow and broad drainageways, gently to moderately sloping. Average annual ppt is about 8 to 12 inches. MAAT 46°F and EFS 90days Elevation is 6700-7000' Most of the ppt falls as winter and spring. Summers are warm and dry. Vegetation is shrubs and junipers and Pinyon pine.

2.00 MAP UNIT COMPOSITION

MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10 Shreek clay loam, 2 to 8 percent slopes, Low Precipitation -clayey-skeletal, montmorillonitic frigid Xerollic Haplargids	60	Formed in alluvium from volcanic rock on the side slopes of old Dissected terrace, gently To moderately sloping, 2 to 8% slopes	Black sagebrush, skeletonweed, Indian rice grass, juniper & Pinyon pine
2.20 Vinini gravelly loam 2 to 8 percent slopes -loamy-skeletal, mixed, frigid shallow Haploxerollic Durargids	25	Formed in alluvium from volcanic rock on gently sloping terrace top, 0 to 2% slopes	Black sagebrush, Indian rice grass, scattered junipers.
2.30			

CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40 Brester sandy loam, 2 to 4 percent slopes, clay Fine-loamy, mixed, frigid Durixerollic Haplargids	8	5	2	Terrace fgts, gently sloping, convex 2 to 4 % slopes	Black sagebrush, skeletonweed, Rabbit Brush. Deep soil with weakly silica cemented substrate.
2.50 Gypsiferous sandy loam, 2 to 4 percent slopes coarse-loamy, mixed, frigid, Xerollic Camborthids	5	5	2	U shaped drainage, Gently sloping, smooth 2 to 4% slopes	Wyoming big sagebrush, Deep soil without argillic horizon or duripan
2.60 Coarse-loamy mixed (calcareous) frigid Xeric Torriorthent	2	3	1	V shaped drainways gently to strongly sloping 2 to 5% slopes	Wyoming big sagebrush, occasional shadscale Deep silt without argillic horizon or duripan

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Shreek clay loam, 2 to 8 percent slopes, thin surface

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-3	CL	0	10	CL, ML	A-6	2, M, GR	SH	VFR	6.6-7.3		
3-12	GR-C	10	35	CL, CH	A-7-6	3, M, PR	EH	FI	6.1-7.3		
12-30	GRV-C	45	65	GC	A-2-7	3, M or F SBK	EH	VFI	7.4-7.8		
30-60	GR-COSL	0	30-40	SM, GM	A-2-4	M	SH	FR	7.9-8.4		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-5	0.2 - 0.6	.17 - .18		MODERATE	.28	5	D	NONE	—	—	>5.0	—	—
5-12	.06 - 0.2	.13 - .14		HIGH									
12-30	.06 - 0.2	.07 - .08		MODERATE									
30-60	2.0 - 6.0	.07 - .08		LOW									

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
4	LOW-MOD.	MODERATE	HIGH	LOW	LOW	>60"	—	—

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10:

3.20 MAJOR COMPONENT NAME: Vinini Taxadjunct

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-4	GR-L	0	15	CL-ML, ML, SM-X	A-4	2, M, PL	SO	VFR	7.4-7.8	< 2	
4-20	GRV-CL	15-20	50-60	GC	A-6, A-2-6	1, C, PR ? 1, F, SBK	LO	LO	7.4-7.8	< 2	
20+	IND										

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-4	0.6 - 2.0	.13 - .15		MODERATE	.32	1	D	NONE	—	—	>5.0	—	—
4-20	0.2 - 0.6	.10 - .12		MODERATE									
20+													

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
6	LOW	MODERATE	MODERATE	LOW	MODERATE	10-20	THICK	—

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20:

3.30 MAJOR COMPONENT NAME:

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS

3.31 NONCONTRASTING INCLUDED SOILS WITH 3.30:

Footnotes

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.) W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE

C	Gravel
SG	Sandy gravel
S	Sand
COS	Coarse sand
FS	Fine sand
VFS	Very fine sand
LCOS	Loamy coarse sand
LS	Loamy sand
LFS	Loamy fine sand
LVFS	Loamy very fine sand
COSL	Coarse sandy loam
LS	Sandy loam
FSL	Fine Sandy Loam
VFSL	Very fine sandy loam
SIC	Silty Clay
C	Clay
SICL	Silty clay loam
CL	Clay loam
L	Loam
SIL	Silt loam
SCL	Sandy clay loam
UWB	Unweathered bedrock
WB	Weathered bedrock

HORIZON TEXTURE MODIFIERS

CB	Cobbly
CBA	Angular Cobbly
CBV	Very cobbly
FL	Fleggy
GR	Gravelly
CRC	Coarse gravelly
GRF	Fine gravelly
GRV	Very gravelly
SR	Stratified
ST	Stony
STV	Very stony
STE	Extremely stony

STRUCTURE

SG	Single grain
1	Weak
2	Moderate
3	Strong
VF	Very fine
F	Fine
M	Medium
C	Coarse
VC	Very coarse
GR	Granular
CR	Crumb
PL	Platy
PR	Prismatic
ABK	Angular blocky
SBK	Subangular blocky
M	Massive

CONSISTENCE

Dry:

LO	Loose
SO	Soft
SH	Slightly hard
H	Hard
VH	Very hard
EH	Extremely hard

Moist:

LO	Loose
VFR	Very friable
FR	Friable
FI	Firm
VFI	Very firm
EFI	Extremely firm

SOIL MAP UNIT INTERPRETATION - ORDER - 3

USDA-SCS

SOIL MAP UNIT SYMBOL AND NAME: 310 Shreen - Vinini Association

PRESENT MAJOR LAND USES: Range

POTENTIAL FORESEEABLE USES: Forage * See below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR.						3c
NIRR.	3c	6s		7s	6c	
SUITABILITY FOR RANGE SEEDING	POOR - PRECIPITATION	VERY POOR - ROOT ZONE AVAIL WATER CAP.		VERY POOR - ROOT ZONE AWC	POOR PRECIPITATION	POOR - PRECIPITATION
Shallow Excavation	GOOD	SEVERE - CEMENTED PAN		SEVERE - CEMENTED PAN	SEVERE - CUTBANKS CAVE	SLIGHT
Local Roads & Streets	MODERATE - SHRINK-SWELL	SEVERE - LOW STRENGTH		SEVERE - CEMENTED PAN LOW STRENGTH	MODERATE - FROST ACTION	MODERATE - FLOODS LOW STRENGTH, FROST ACTION
Roadfill	GOOD	POOR LOW STRENGTH, THIN LAYER		POOR - AREA RECLAIM, LOW STRENGTH	GOOD	FAIR - LOW STRENGTH
Sand	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER		IMPROBABLE - EXCESS FINES, THIN LAYER	PROBABLE	IMPROBABLE - EXCESS FINES
Gravel	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES THIN LAYER		IMPROBABLE - EXCESS FINES, THIN LAYER	PROBABLE	IMPROBABLE - EXCESS FINES
Pond Reservoir Areas	SEVERE - SEEPAGE	[redacted] SEVERE - CEMENTED PAN		SEVERE - CEMENTED PAN	SEVERE - SEEPAGE	3-4% : MODERATE - SLOPE
Embankments, Dikes & Leeves	MODERATE - SEEPAGE	SEVERE - THIN LAYER		SEVERE - THIN LAYER	MODERATE - PIPING, SEEPAGE	SEVERE - PIPING

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY			SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE				
	ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX			WILD HERB PLANTS	CONIFEROUS PLANT	SHRUBS
2.10 Shreen, Low Precipitation		UTAH JUNIPER				GOOD	POOR	GOOD
2.20 Vinini T		NONE				FAIR	-	FAIR
2.30								
2.40 Buster		NONE				FAIR		FAIR
2.50 Applebush		NONE				GOOD	-	GOOD
2.60 Xeric Torriorthents, coarse-loamy, mixed (calcareous) frigid.		NONE				GOOD	-	GOOD

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS					
		2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
bluebunch wheatgrass	AGSP	10	2		2	3	
Thurber needlegrass	STTH2	5				4	
needle and thread	STCU4	5	10		10	7	5
Indian ricegrass	ORHY	2	12		12	12	
Sandberg bluegrass	POSE	3				2	
Pine bluegrass	POSC		6		6	7	
galleta	HIJA					2	
bottlebrush squirreltail	SIHY					3	
basin wildrye	ELCI2						12
Gilia sagebrush	SPAI						8
basin big sagebrush	ARTRT						10
green rabbitbrush	CHRYS9						10
Wyoming big sagebrush	ARTRW					25	5
other perennial grasses	PPG6	5	10		10		20
other perennial forbs	PPFF	10	15		15	15	15
other annual forbs	AAFF	5					
Spiny hopsage	GRSP					4	
Nevada ephedra	EPNE					2	
Spiny hopsage	TECA2					2	
bud sagebrush	ARSP5		7		7		
Winterfat	EULA5		7		7	2	
fourwing saltbush	ATCA2		3		3	8	
Douglas rabbitbrush	CHVI8		2		2	2	
Black sagebrush	ARARN	20	25		25		5
antelope bitterbrush	PUTR2	5					
littleleaf pea-mahogany	CELE3	5					
elf fleece	COMES	5					
ephedra	EPHED	6					
other shrubs	SSS6	10	6		6		5
Utah juniper	JUOS	5					5
RANGE SITE NAME OR NUMBER		Juniper Savannah 11-14"	Shallow Loamy 8-12"		Shallow loamy 8-12"	Loamy 8-10"	Wash 5-12"
POTENTIAL PRODUCTION LBS. AC. DRY WT. FAVORABLE YEARS		500	650		650	800	700
NORMAL YEARS		300	350		350	400	500
UNFAVORABLE YEARS		250	175		175	400	300

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2:

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY 311

USDA-BDS

SOIL SURVEY AREA: NYE CO - Sevenmile Wash MLRA: 28 DATE: 11/27/79 BY: ASK RPZ
Rev. 11/30/80 PLS, DMS

SOIL MAP UNIT SYMBOL AND NAME: 311 : Shreek clay loam, 8 to 30 percent slopes, moist

1.00 SETTING Dissected terrace that abuts rock controlled area
MAP 12-16", MAAT 46°F FFS 80 days, Elevation 7000-7200', most of the ppt falls in winter and spring, summers are hot and dry, vegetation is Pinyon Pine and Juniper woodland with an understory of Wyomingensis.

2.00 MAP UNIT COMPOSITION

	MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10	Shreek clay loam, 8 to 30 percent slopes, moist - Clayey-skeletal, montmorillonitic, frigid Xerollic Haplargids	95	Formed in alluvium from andesitic rocks on strongly sloping to moderately steep smooth uniform hillslopes of dissected fan terrace with stabilized small drains, 8-30% slopes	P.J. Woodland w/Wyomingensis understory.
2.20				
2.30				

	CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40	Coarse-loamy and sandy, mixed (calcareous) frigid Xeric Torriorthents	5	2	5	Flat and V-shaped drainage bottoms gently sloping, linear; 0-4% slopes	no Bt horizon - non skeletal
2.50						
2.60						

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Shreek Creek clay loam, 8 to 30 percent slopes, moist

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-5	CL	0	10	CL, ML	A-6	2, M, GR	SH	VFR	6.6-7.3		
5-12	GR-C	10	35	CL, CH	A-7-6	3, M, PR	EH	FI	6.1-7.3		
12-30	GRV-C	45	65	GC	A-2-7	3, M TO F, SBR	EH	VFI	7.4-7.8		
30-60	GR-COSL	0	30-40	SM, GM	A-2-4	M	SH	FR	7.9-8.4		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)
0-5	0.2-0.6	.17-.18		MODERATE	.28	5	D	NONE	—	—	>5.0
5-12	.06-0.2	.13-.14		HIGH							
12-30	.06-0.2	.07-.08		MODERATE							
30-60	2.0-6.0	0.7-.08		LOW							

EROSION HAZARD WIND	EROSION HAZARD WATER	CORROSIVITY WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
EROD. GRP. 4	MOD.-HIGH	MODERATE	HIGH	LOW	LOW	760"	—	—

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10: Pedoli soils, 8 to 30 percent slopes, moist (20%)

3.20 MAJOR COMPONENT NAME:

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20:

3.30 MAJOR COMPONENT NAME:

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARONESS

3.31 NONCONTRASTING INCLUDED SOILS WITH 3.30:

Footnotes:

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.)
W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE

G	Gravel
SG	Sandy gravel
S	Sand
COS	Coarse sand
FS	Fine sand
VFS	Very fine sand
LCOS	Loamy coarse sand
LS	Loamy sand
LFS	Loamy fine sand
LVFS	Loamy very fine sand
COSL	Coarse sandy loam
LS	Sandy loam
FSL	Fine Sandy Loam
VFSL	Very fine sandy loam
SIC	Silty Clay
C	Clay
SICL	Silty clay loam
CL	Clay loam
L	Loam
SIL	Silt loam
SCL	Sandy clay loam
UWB	Unweathered bedrock
WB	Weathered bedrock

HORIZON TEXTURE MODIFIERS

CB	Cobbly
CBA	Angular Cobbly
CBV	Very cobbly
FL	Flaggy
GR	Gravelly
GRC	Coarse gravelly
GRF	Fine gravelly
GRV	Very gravelly
SR	Stratified
ST	Stony
STV	Very stony
STX	Extremely stony

STRUCTURE

SG	Single grain
1	Weak
2	Moderate
3	Strong
VF	Very fine
F	Fine
M	Medium
C	Coarse
VC	Very coarse
GR	Granular
CR	Crumb
PL	Platy
PR	Prismatic
ABK	Angular blocky
SBK	Subangular blocky
M	Massive

CONSISTENCE

Dry:

LO	Loose
SO	Soft
SH	Slightly hard
H	Hard
VH	Very hard
EH	Extremely hard

Moist:

LO	Loose
VFR	Very friable
FR	Friable
FI	Firm
VFI	Very firm
EFI	Extremely firm

USDA-SCS

SOIL MAP UNIT INTERPRETATION - ORDER - 3

SOIL MAP UNIT SYMBOL AND NAME: 311- Shreen T. clay loam, 8 to 30 % slopes, moist
PRESENT MAJOR LAND USES: Range
POTENTIAL FORESEEABLE USES: see below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR.				3c		
NIRR.	6s			POOR- PRECIPITATION		
SUITABILITY FOR RANGE SEEDING	GOOD			SLIGHT		
Shallow Excavations	15-30%: SEVERE - SLOPE			MODERATE - FLOODS		
Local Roads & Streets	15-30%: SEVERE - SLOPE			LOW STRENGTH, FROST ACTION		
Roadfill	25-30%: SEVERE SLOPE			FAIR - LOW STRENGTH		
Sand	IMPROBABLE - EXCESS FINES, THIN LAYER			IMPROBABLE - EXCESS FINES		
Gravel	IMPROBABLE - EXCESS FINES, THIN LAYER			3-4%: MODERATE - SLOPE		
Pond Reservoir Area	SEVERE: SEEPAGE			SEVERE - PIPING		
Embankments, Dikes, Leeves	8-30%: SEV. - SLOPE, SEEP. MODERATE - SEEPAGE					

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX	SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE		Herb. Pltg	Con Pltg	Wildlife
2.10 Shreen		Pinyon Pine, Juniper				Fair	Fair	Fair
2.20								
2.30								
2.40 Sandy and coarse-loamy, mixed (calcareous) Xeric Torriorthents		NONE				Fair	Fair	Fair
2.50		NONE						
2.60								

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS					
		2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
Bluebunch wheatgrass	AGSP	10-15			1-5		
blue grama	BOGR4	1-5			1-5		
basin wildrye	ELCI2	2-5			5-15		
Indian rice grass	ORHY	2-5			1-5		
mutton grass	POFE	1-5			-		
Sandberg bluegrass	POSE	2-5			1-5		
Thurbers needlegrass	STTH2	10-15			-		
western wheatgrass	AGSM	5-5			1-5		
alkali sacation	SPAI	-			5-10		
needle and thread	STCO4	-			2-5		
buckwheat	ERIOG	1-2			-		
Indian paintbrust	CAST2	1-2			-		
bluebells	MERTE	1-2			-		
globemallow	SPHAE	-			1-2		
phlox	PHLOX	1-2			-		
Penstemon	PENST	1-2			-		
princes plume	STANL	-			-		
Big sage brush	ARTRW	10-15			5-7		
Wyer brush	PUTR2	0-10			-		
Cleome	COMI5	0-5			1-5		
ephedra	EPHED	1-2			2-5		
Green rabbit brush	CHVI5	-			5-10		
Fourwing saltbush	ATCA2	-			2-5		
Basin big sage brush	ARTRT	-			5-7		
Black sage brush	ARNO	1-2			-		
Douglas rabbit brush	CHVI8	1-2			-		
mountain mahogany	CELEO	0-5			-		
Service berry	AMELA	1-2			-		
rose	ROSA	1-2			-		
currant	RIBES	1-2			-		
RANGE SITE NAME OR NUMBER		P/J woodland big sage			Warm 5-12"		
POTENTIAL PRODUCTION LBS. AC. DRY WT. FAVORABLE YEARS		300-700			700		
NORMAL YEARS		300-900			400		
UNFAVORABLE YEARS		300-900			300		

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2: include sand dropseed, bottle brush squirreltail, spiny hopsage, desert peach, + cacti in NV-D28-9; include manzanita, milkvetch, onion, in P/J sagebrush.

330

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY

USDA-SCS

SOIL SURVEY AREA: Nye Co. Sevenmile Wash Area MLRA: 28 DATE: 11/30/80 BY: PLS, DMS

SOIL MAP UNIT SYMBOL AND NAME: Hopeka - Keane - Rock Outcrop association - 330

1.00 SETTING Ios mountains and Dolomite - Limestone Hills
F/C, 6500 - 8200; APP 12-16; AWAI - 43°F; FFS 50-80 days; most ppt. falls in winter and spring

2.00 MAP UNIT COMPOSITION — MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10 Hopeka very gravelly loam, 15 to 30 percent slopes - loamy-skeletal, carbonatic, frigid Lithic Xeric Torriorthents	45	15-30%, Hillslopes, shoulders + footslopes; smooth and concave; residuum	PJ black sagebrush understory
2.20 Ados gravelly loam, 4 to 15 percent slopes - loamy-skeletal, carbonatic, frigid Xerollic Paleorthids	25	4-15%; concave footslopes and toeslopes; smooth residuum	PJ - black sagebrush understory
2.30 Rock outcrop, limestone	15	shoulders and ridges of mountains	none

CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40 Aridic Durixerolls, 4 to 30 percent slopes	8	1	20	upper slopes and northernly slopes; smooth, concave, 8-30%	mollic soils with duripan
2.50 Loamy-skeletal and coarse-loamy, mixed, calcareous, frigid Xeric Torriorthents, 2 to 8 percent slopes Carbonatic, frigid	4			2-8% slopes; drainageways; concave + linear	coarse-loamy control section; deep
2.60 Loamy-Skeletal Xeric Torriorthents, 4 to 15 percent slopes	3			4-15% slopes, colluvial toeslopes	Deep soils, black sagebrush vegetation

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: * Hopeka very gravelly loam, 15 to 30 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-18	GRV-L	0-10	50-70	GC	A-2	2,F+M,PL+SBK;M	SO, LO	VFR, LO	8.5-9.0	<2	
18+	UWB										

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTH
0-18	0.6-2.0	.04-.07		LOW	.24	1	D	NONE	-	-	76.0	-	-
18+													

EROSION HAZARD WIND	EROSION HAZARD WATER	CORROSIVITY WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK THICKNESS	CEMENTED PAN OR BEDROCK HARDNESS
EROD. GRP. 1	HIGH	HIGH	HIGH	LOW	MODERATE	10-20	-	HARD

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10: coarse-loamy and sandy skeletal, mixed (calcareous) frigid Lithic Xeric Torriorthents; Lithic Xeric Camborthids

3.20 MAJOR COMPONENT NAME: Ados gravelly loam, 4 to 15 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-4	GR-L	0	20-50	ML,ML-CL,SM,SM-SC	A-4	1,M,PL	SH	FR	7.9-8.4		
4-30	G-Y-L	<5	65-15	SM,SM-SC	A-2-4	M	SO, H"	FR FI	7.9-8.4		
30-42	IND										
42+	R										

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-4	0.6-2.0	.11-.14		LOW	.32	2	C	NONE	-	-	76.0	-	-
4-30	0.6-2.0	.08-.09		LOW									
30-42													
42+													

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK THICKNESS	CEMENTED PAN OR BEDROCK HARDNESS
4L	MOD.-HIGH	MODERATE	LOW	LOW	MODERATE	20-40	THICK	-

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20: Coarse loamy, mixed, frigid Xerollic Durorthids and Durixerolls Calciorthid

3.30 MAJOR COMPONENT NAME: Rock Outcrop, limestone

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
						2							

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK THICKNESS	CEMENTED PAN OR BEDROCK HARDNESS

3.31 NONCONTRASTING INCLUDED SOILS WITH 3.30:

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.)
W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE

G	Gravel
SG	Sandy gravel
S	Sand
COS	Coarse sand
FS	Fine sand
VFS	Very fine sand
LCOS	Loamy coarse sand
LS	Loamy sand
LFS	Loamy fine sand
LVFS	Loamy very fine sand
COSL	Coarse sandy loam
SL	Sandy loam
FSL	Fine Sandy Loam
VFSL	Very fine sandy loam
SIC	Silty Clay
C	Clay
SICL	Silty clay loam
CL	Clay loam
L	Loam
SIL	Silt loam
SCL	Sandy clay loam
UWB	Unweathered bedrock
WB	Weathered bedrock

HORIZON TEXTURE MODIFIERS

CB	Cobbly
CBA	Angular Cobbly
CBV	Very cobbly
FL	Flaggy
GR	Gravelly
GRC	Coarse gravelly
GRF	Fine gravelly
GRV	Very gravelly
SR	Stratified
ST	Stony
STV	Very stony
STE	Extremely stony

STRUCTURE

SG	Single grain
1	Weak
2	Moderate
3	Strong
VF	Very fine
F	Fine
M	Medium
C	Coarse
VC	Very coarse
GR	Granular
CR	Crumb
PL	Platy
PR	Prismatic
ABK	Angular blocky
SBK	Subangular blocky
M	Massive

CONSISTENCE

Dry:

LO	Loose
SO	Soft
SH	Slightly hard
H	Hard
VH	Very hard
EH	Extremely hard

Moist:

LO	Loose
VFR	Very friable
FR	Friable
FI	Firm
VFI	Very firm
EFI	Extremely firm

A-131

330

SOIL MAP UNIT INTERPRETATION - ORDER - 3

USOA-SCS

SOIL MAP UNIT SYMBOL AND NAME: 330 - Hopeko - Adas - Rock Outcrop Association

PRESENT MAJOR LAND USES: Range

POTENTIAL FORESEEABLE USES: see below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR.		4e				
NIRR.	6s *		8	6c	6e	
SUITABILITY FOR RANGE SEEDING	VERY POOR-ROOT ZONE, AWC	POOR - ROOT ZONE, AWC,				
Shallow Excavations	SEVERE - DEPTH TO ROCK	SEVERE - CEMENTED				
	15-30%: SEV. - SLOPE, D.T.R.	PAN				
local Roads & Streets	SEVERE - DEPTH TO ROCK	MODERATE-CEMENTED PAN,				
	15-30%: MOD. - SLOPE, D.T.R.	SLOPE, FROST ACTION				
Roadfill	POOR - AREA RECLAIM	POOR - AREA RECLAIM				
	25-30%: POOR - SLOPE, A.R.					
Sand	IMPROBABLE - EXCESS FINES	IMPROBABLE - EXCESS FINES, THIN LAYER				
Gravel	IMPROBABLE - EXCESS FINES	IMPROBABLE - EXCESS FINES, THIN LAYER				
Pond Reservoir Area	SEVERE - DEPTH TO ROCK	8-15%: SEVERE - SLOPE				
	15-30%: SEV. - SLOPE, D.T.R.					
Embankments, Dikes, Levees	SEVERE - THIN LAYER	SEVERE - SEEPAGE				

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX	SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE GRAIN & SEED CROPS	DOMESTIC GRASSES AND LEGUMES	WILD HERB PLANTS	CONIFEROUS PLANTS	SHRUBS
2.10 Hopeko		Pinyon Pine Utah Juniper				POOR	V. POOR	POOR
2.20 Adas		Pinyon Pine Utah Juniper		POOR	POOR	FAIR	V. POOR	FAIR
2.30 Rock Outcrop, limestone		NONE				—	—	—
2.40 Arid Loamy Soils		Pinyon Pine Utah Juniper				POOR	—	POOR
2.50 Loamy skeletal, carbonatic, frigid Xeric Torriorthents		NONE				POOR	—	FAIR
2.60 Loamy Skeletal, Carbonatic, frigid Xeric Torriorthents		None				POOR	—	POOR

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS					
		2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
Thurber needlegrass	STTH2	12	12		15	15	
bluebunch wheatgrass	AGSP	2	2		5	20	2
Indian ricegrass	ORHY	10	10			5	12
bottlebrush squirreltail	SIHY	2	2			2	
Pine bluegrass	POSC				6	2	6
basin wildrye	ELCI2				2	2	
Sandberg bluegrass	POSE					2	
needleandthread	STCO4						10
Other grasses	PPGG	4	4		2		10
Forbs	PPFF	10	10		10	15	15
Bud sagebrush	ARSP5						3
Winterfat	EULA5						3
fourwing saltbush	ATCA2						
rubber rabbitbrush	CHNA					2	
Serviceberry	AMAL2					2	
Spineless horsebrush	TECA2					1	
Mtn. big sagebrush	ARTRV				30	25	
Wyoming big sagebrush	ARTRW				10		
Snowberry	SYMPH				5		
black sagebrush	ARARN	40	40				25
ephedra	EPHED	5	5				
Douglas rabbitbrush	CHVI8	5	5		5	2	2
other shrubs	SSSS	10	10		10		6
RANGE SITE NAME OR NUMBER		P/J black sage	P/J black sage		P/J big sage	Loamy 10-12"	Shallow loamy
POTENTIAL PRODUCTION LBS. AC. DRY WT. FAVORABLE YEARS		725	725		900	900	650
NORMAL YEARS		500	500		600		350
UNFAVORABLE YEARS		250	250		300	500	175

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2:

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY

USDA-SCS

SOIL SURVEY AREA: Nye Co., Sevenmile Wash MLRA: 28 DATE: 10/4/79 BY: CAK

SOIL MAP UNIT SYMBOL AND NAME: 331 - Hopeka - Packham Variant Association Revised 11/30/80 PLS DATS

1.00 SETTING Low mountains, rolling upland topography of the Limestone and Dolomite sections of the Antelope and Monitor Ranges surrounding major valley including the foothills and steep fans that are calcareous, AAP- 12-16", AAAT- 47°F, FFS - 70-90 days. Elev. 7200-8200'; most ppt. falls in winter + spring

2.00 MAP UNIT COMPOSITION

	MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10	Hopeka cobbly loam, 15 to 50 percent slopes Loamy-skeletal, carbonatic, frigid Xeric Torriorthents	55	Formed in residium from Limestone and Dolomite on strongly sloping to steep hilly uplands, 15 to 50% Slopes	Pinyon - Juniper, black Sagebrush understory
2.20	Packham Variant very gravelly loam, 30 to 50 percent slopes Loamy-skeletal, carbonatic frigid, Xerollic Camborthids	25	Formed in residium from Limestone and Dolomite on moderately steep and steep mountain foot slopes, 30-50 % slopes	Juniper Savanna
2.30				

	CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40	Loamy-Skeletal, Carbonatic, Frigid Xerollic Palecorthids, 5 to 30 percent slopes	8	30	2	Footslopes and fanterraces at base of Limestone hills	Petrocalcic horizon, black sagebrush
2.50	Loamy-skeletal, carbonatic, frigid Aridic and Pachic Haploxerolls, 4 to 15 percent slopes	5	25	5	Swales, drainways & colluvial toeslopes on benches and in small mountain valleys.	shallow, calcic epipedon, Big Sagebrush Loamy 14-16" ppt.
2.60	-Coarse-loamy, carbonatic, frigid Aridic Haploxerolls	5	15	2	30-50% Steep dust plopes	No argillic horizon, deep soils P/J, Big sagebrush
2.70	Rock Outcrop, Limestone	4	10	3	Ledges on peaks and sideslopes	No soil

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Hopeka cobbly loam

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-5	CB-L	15	20	ML,CL-ML,SM,SM-SC	A-4	1,F,CR	SO	VFR	7.9-8.4		
5-11	GRV-L	15	60	GM,GM-GC	A-2-4	1,M,SBK	SO	FR	7.9-8.4		
11-20	Weathered bedrock										
20	Unweathered bedrock										

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-4	0.6-2.0	.13-.14		LOW	.32	1	D	NONE	-	-	7 6.0	-	-
4-12	0.6-2.0	.08-.10		LOW									
12+													

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK THICKNESS	CEMENTED PAN OR BEDROCK HARDNESS
4L	HIGH	MODERATE	HIGH	LOW	MODERATE	10-20	-	HARD

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10: Lithic Argixerolls and L- Haploxerolls, loamy skeletal, mixed, frigid.

3.20 MAJOR COMPONENT NAME: Packham Variant very gravelly loam, 30 to 50 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-14	GRV-L	10-20	45-55	GM,GM-GC	A-2-4	1,F,CR	SO	FR	7.9-8.4		
14-29	GRV-LCOS	0	55	GW-GM	A-1-a	M	SH	FR	7.9-8.4		
29+	R										

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-14	0.6-2.0	.09-.11		LOW	.28	2	C	NONE	-	-	>6.0	-	-
14-29	6.0-20	.04-.06		LOW									
29+													

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK THICKNESS	CEMENTED PAN OR BEDROCK HARDNESS
4L	HIGH	MODERATE	LOW	LOW	MODERATE	20-40	-	HARD

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20:

3.30 MAJOR COMPONENT NAME:

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK THICKNESS	CEMENTED PAN OR BEDROCK HARDNESS

3.31 NONCONTRASTING INCLUDED SOILS WITH 3.30:

Footnotes

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.)
W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE

G	Gravel
SG	Sandy gravel
S	Sand
COS	Coarse sand
FS	Fine sand
VFS	Very fine sand
LCOS	Loamy coarse Sand
LS	Loamy sand
LFS	Loamy fine sand
LVFS	Loamy very fine sand
COSL	Coarse Sandy loam
LS	Sandy loam
FSL	Fine Sandy Loam
VFSL	Very fine sandy loam
SIC	Silty Clay
C	Clay
SICL	Silty clay loam
CL	Clay loam
L	Loam
SIL	Silt loam
SCL	Sandy clay loam
UWB	Unweathered bedrock
WB	Weathered bedrock

HORIZON TEXTURE MODIFIERS

CB	Cobbly
CBA	Angular Cobbly
CBV	Very cobbly
FL	Flaggy
GR	Gravelly
GRC	Coarse gravelly
GRF	Fine gravelly
GRV	Very gravelly
ST	Stratified
ST	Stony
STV	Very stony
STX	Extremely stony

STRUCTURE

SG	Single grain
1	Weak
2	Moderate
3	Strong
VF	Very fine
F	Fine
M	Medium
C	Coarse
VC	Very coarse
GR	Granular
CR	Crumb
PL	Platy
PR	Prismatic
ABK	Angular blocky
SBK	Subangular blocky
M	Massive

CONSISTENCE

Dry:

LO	Loose
SO	Soft
SH	Slightly hard
H	Hard
VH	Very hard
EH	Extremely hard

Moist:

LO	Loose
VFR	Very friable
FR	Friable
FI	Firm
VFI	Very firm
EFI	Extremely firm

A-32

SOIL MAP UNIT INTERPRETATION - ORDER - 3

USDA-SCS

SOIL MAP UNIT, SYMBOL AND NAME: 331 – Hopeko - Packham Variant Association

PRESENT MAJOR LAND USES: Range

POTENTIAL FORESEEABLE USES: See below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1

SPECIFIED USE	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR.						
NIRR.	7S	7S	7S	6S	6S	7e
SUITABILITY FOR RANGE SEEDING	VERY POOR - ROOT ZONE, AWC	VERY POOR - ROOT ZONE, AWC, 30-50%; V. POOR SLOPE, RZ, AWC	VERY POOR - ROOT ZONE, AWC		VERY POOR - ROOT ZONE, AVAIL. WATER CAP.	30-50%: V. POOR PRECIPITATION
Shallow Excavations	SEVERE - DEPTH TO ROCK	SEVERE - DEPTH TO ROCK	SEVERE - DEPTH TO ROCK		SEVERE - CEMENTED PAN	30-50%: SEV. SLOPE
Local Roads & Streets	15-30%: SEV. - SLOPE, D.T.R	30-50%; SEV. - SLOPE, D.T.R.	15-30%; SEV. - D.T.R, SLOPE		15-30%: SEV. - SLOPE, C.P.	
Road Fill	SEVERE - DEPTH TO ROCK	SEVERE - DEPTH TO ROCK	SEVERE - DEPTH TO ROCK		SEVERE - LOW STRENGTH	30-50%: SEVERE - SLOPE
Sand	15-30%: SEV. - SLOPE, D.T.R	30-50%; SEV. - SLOPE, D.T.R.	15-30%; SEV. - SLOPE, D.T.R		15-30%: SEV. - SLOPE, LOW S.	[illegible]
Gravel	POOR - AREA REC., THIN LAYER	POOR - AREA REC., THIN LAYER	POOR - AREA REC., THIN LAYER		POOR - LOW STRENGTH, THIN LAYER	30-50%: SEVERE - SLOPE
Pond Reservoir Area	25-30%: POOR - SLOPE, A.R., T.L.	25-50%; POOR - SLOPE, A.R., T.L.	25-30%; POOR - SLOPE, A.R., T.L.		25-30%: POOR - SLOPE, L.S., T.L.	IMPROBABLE - EXCESS FINES
Embankments, Dikes, Levees	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER		IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES
	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER		IMPROBABLE - EXCESS FINES, THIN LAYER	30-50%: SEVERE - [illegible] SLOPE
	SEVERE - DEPTH TO ROCK 15-30%: SEV. - SLOPE, D.T.R,	SEVERE - DEPTH TO ROCK, SEEP, 30-50%: SEV. - SLOPE, D.T.R, SEEP,	SEVERE - DEPTH TO ROCK 15-30%: SEV. - SLOPE, D.T.R,		CEMENTED PAN	SEVERE - PIPING
	SEVERE - THIN LAYER	SEVERE - THIN LAYER, SEEPAGE	SEVERE - THIN LAYER		SEVERE - THIN LAYER	

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX	SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE Hab. Herb. Plts	Con. Plts	Shrubs
2.10 Hopeko		Pinyon - Juniper		Poor	V. Poor	Poor
2.20 Packham Variant		Pinyon - Juniper		Fair	Poor	Fair
2.30		NONE		Poor	--	Poor
2.40 Loamy - skeletal, carbonatic frigid Xerollic Palecarthids		NONE		Var		Var
2.50 Loamy - skeletal, carbonatic, frigid Pachic Haploxerolls		NONE		Fair		Fair
2.60 Coarse - loamy, carbonatic frigid Aridic Haploxerolls		Pinyon Pinyon Utah Juniper		Fair	Fair	Fair

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS 2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
						See footnote	
Thickspike wheatgrass	AGSP	10-15	10-15		10-15	20	10-15
blue grama	BOGR4	1-5	1-5		1-5		1-5
basin wildrye	LECI2	-	-		-	3	2-5
Indian ricegrass	ORHY	1-5	1-5		1-5		2-5
needle and thread	STCOH	-	-		-		-
bottlebrush squirreltail	SIHY	2-5	2-5		2-5		-
sandberg bluegrass	POSE	2-5	2-5		2-5	5	2-5
Thurber needlegrass	STTH2	10-15	10-15		10-15	5	10-15
western wheatgrass	AGSM	-	-		-	2	2-5
Buckwheat	ERIOG	-	-		-		1-2
Gooseberry	RIBES	-	-		-		-
Cliffrose	PENST	1-2	1-2		1-2		1-2
Phlox	PHLOX	1-2	1-2		1-2		1-2
Lupine	LUPIN	1-2	1-2		1-2		-
Big Sagebrush (Hybridizing)	ARTRW	-	-		-	5	10-15
Black Sagebrush	ARNO	20-30	20-30		20-30		1-2
Antelope bitterbrush	PUTR2	1-10	1-10		1-10		1-10
Green ephedra	EPVI	1-2	1-2		1-2		
Bud sagebrush	ARSPS	-	-		-		-
ephedra	EPHED	-	-		-		1-2
Alligator juniper	CONE5	1-5	1-5		1-5		1-5
Douglas rabbitbrush	CHVI4	1-3	1-3		1-3		1-2
Small rabbitbrush	CHVI5	-	-		-		-
Mountain mahogany	CELEO	1-5	1-5		1-5		1-5
Fourwing saltbush	ATCA2	-	-		-		-
Serviceberry	AMELA	1-3	1-3		1-3	5	1-2
Idaho fescue	FEID					10	
Pine bluegrass	POSC					5	
Mtn big sagebrush	ARTRV					10	
Low rabbitbrush	CHVI8					2	
RANGE SITE NAME OR NUMBER		PJ Blade sage	Juniper Savanna		Shallow Hill f-ft" p.z.	Loamy 12-16"	MT-Big Sage
POTENTIAL PRODUCTION LBS. AC. DRY WT. FAVORABLE YEARS		250-725	250-725		250-725	1100	[illegible]
NORMAL YEARS		250-725	250-725		250-725	900	[illegible]
UNFAVORABLE YEARS		250-725	250-725		250-725	700	[illegible]

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2: 2.50 other perennial grasses: 5% other perennial forbs PPEF 10%; other annual forbs AAFF 5%; horsebrush TETRA3 3%; other shrubs SSSS 5%

360

USDA-BDI

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY

SOIL SURVEY AREA: Nye Co. Seven mile wash MLRA: 28 DATE: 28 BY: 11/30/78 PJS, DMS

SOIL MAP UNIT SYMBOL AND NAME: Punchbowl - Segura - Locane association - 3100

1.00 SETTING Andesite Hills and Mountains with steep sideslopes and narrow drainageways
AAP-11 to 16, AAAT-41 to 47°F, FFS- 80, Elev. 6500' to 8000', most ppt falls in winter + spring.

2.00 MAP UNIT COMPOSITION

MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10 Punchbowl sandy loam, 8 to 30 percent slopes, moist Loamy, mixed, frigid, Lithic Xerollic Haplargids	45	8-30% slopes; shoulders and tops of andesitic hills and mountains; residuum	black sagebrush, stipa Indian ricegrass, cusped
2.20 Segura extremely stony sandy loam, 15 to 50 percent slopes Loamy mixed frigid Lithic Argixerolls	30	15-50% slopes; backslopes and footslopes of andesitic hills and mountains; residuum	Pinyon-Juniper woodland, big sagebrush understory
2.30 Locane extremely stony loam, 8 to 30 percent slopes Clayey-skeletal, montmorillonitic, frigid Lithic Xerollic Haplargids	15	8-30% slopes; shoulders and tops of andesitic hills and mountains, residuum	Pinyon/Juniper Woodland, bunchgrass understory with patches of black sagebrush

CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40 Rock Outcrop, andesite	3				
2.50 Coarse-loamy mixed frigid Aridic and Pachic Haploxerolls	8			2-8% slopes; narrow drainageways	coarse-loamy control section, pachic, lacks argillic horizon
2.60 Coarse-loamy, mixed (calcareous), frigid Xeric Torriorthents, 2 to 4 percent slopes, flooded	2			2-4% slope; drainageways	coarse-loamy control section, lacks argillic horizon, occasional flooding

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Punchbowl sandy loam, 8 to 30 percent slopes, moist

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-2	SL	0	0	SM-SC, SM	A-2-4, A-4	1, F, GR	SO	VFR	7.4-7.8		
2-7	SCL	0	0	SM-SC, SM	A-4, A-6	2, M, SBK	H	FI	7.9-8.4		
7-11	GR-C	0	30	SC, MC	A-7-6, A-6	M	VH	VPI	7.9-8.4		
11+	WB	0	0								

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-3	2.0-6.0	.11-.13		LOW	.37	1	D	NONE	—	—	>6.0	—	—
3-7	0.2-0.6	.14-.16		MODERATE									
7-11	.06-0.2	.11-.13		MODERATE									
11+													

EROSION HAZARD WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK THICKNESS	CEMENTED PAN OR BEDROCK HARDNESS
5	MOD-HIGH	HIGH	HIGH	LOW	MODERATE	10-20	—	HARD

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10:

3.20 MAJOR COMPONENT NAME: Segura extremely stony sandy loam, 15 to 50 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-3	STX-SL	15	10	SM, SM-SC	A-2-4	2, M, GR	LO	VFR	7.9-8.4		
3-7	SCL	0	15	SM-SC, SC	A-4, A-6	2, M, SBK	SH	FI	7.9-8.4		
7-10	GR-SL	0	45	GM-SM, SM-SC, GM-GC	A-2-4	1, M, SBK	SH	FI	7.5-8.4		
10+	R										

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. ORP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-3	2.0-6.0	.09-.11		LOW	.20	1	D	NONE	—	—	>5.0	—	—
3-7	0.2-0.6	.15-.17		MODERATE									
7-10	20-6.0	.07-.08		LOW									
10+													

EROSION HAZARD WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK THICKNESS	CEMENTED PAN OR BEDROCK HARDNESS
3	MOD-HIGH	HIGH	LOW	LOW	MODERATE	10-20	—	HARD

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20:

3.30 MAJOR COMPONENT NAME: Locane extremely stony loam, 8 to 30 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-4	STX-L	71	85	GW-GM, GP-GC, GM-GC	A-2-4	1, M, SBK	SO	FR	7.4-7.8		
4-8	CBV-SIL	20	35	CL-ML, ML	A-4	M	H	FI	6.6-7.2		
8-16	CBV-CL	20	35	GC	A-6	M	SH	VFR	6.6-7.2		
16+	R										

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-4	0.6-2.0	.03-.04		LOW	.28	1	D	NONE	—	—	>5.0	—	—
4-8	0.6-2.0	.11-.13		LOW									
8-16	0.2-0.6	.11-.13		MODERATE									
16+													

EROSION HAZARD WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK THICKNESS	CEMENTED PAN OR BEDROCK HARDNESS
5	MOD-HIGH	MODERATE	MODERATE	LOW	LOW	10-20	—	HARD

3.31 NONCONTRASTING INCLUDED SOILS WITH 3.30: Footmeter

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.)
W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE

G	Gravel
SG	Sandy gravel
S	Sand
COS	Coarse sand
FS	Fine sand
VFS	Very fine sand
LCOS	Loamy coarse sand
LS	Loamy sand
LFS	Loamy fine sand
LVFS	Loamy very fine sand
COSL	Coarse sandy loam
LS	Sandy loam
FSL	Fine Sandy Loam
VFSL	Very fine sandy loam
SIC	Silty Clay
C	Clay
SICL	Silty clay loam
CL	Clay loam
L	Loam
SIL	Silt loam
SCL	Sandy clay loam
UWB	Unweathered bedrock
WB	Weathered bedrock

HORIZON TEXTURE MODIFIERS

CB	Cobbly
CBA	Angular Cobbly
CBV	Very cobbly
FL	Flaggy
GR	Gravelly
GRC	Coarse gravelly
GRF	Fine gravelly
GRV	Very gravelly
SR	Stratified
ST	Stony
STV	Very stony
STE	Extremely stony

STRUCTURE

SG	Single grain
1	Weak
2	Moderate
3	Strong
VF	Very fine
F	Fine
M	Medium
C	Coarse
VC	Very coarse
GR	Granular
CR	Crumb
PL	Platy
PR	Prismatic
ABK	Angular blocky
SBK	Subangular blocky
M	Massive

CONSISTENCE

Dry:

LO	Loose
SO	Soft
SH	Slightly hard
H	Hard
VH	Very hard
EH	Extremely hard

Moist:

LO	Loose
VFR	Very friable
FR	Friable
FI	Firm
VFI	Very firm
EFI	Extremely firm

SOIL MAP UNIT INTERPRETATION - ORDER - 3

USDA-SCS

SOIL MAP UNIT SYMBOL AND NAME: 360 Punchbowl-Segura - Locane association

PRESENT MAJOR LAND USES: Range

POTENTIAL FORESEEABLE USES: See below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR.						3c
NIRR.	7s	7s	7s	8	6c	
SUITABILITY FOR RANGE SEEDING	VERY POOR - ROOT ZONE, AWC	VERY POOR - ROOT ZONE AWC, 30-50%: V. POOR - SLOPE, R.I.	VERY POOR ROOT ZONE, AWC, COARSE FRAGMENTS			POOR - PRECIPITATION
Shallow Excavation	SEVERE - DEPTH TO ROCK	SEVERE - DEPTH TO ROCK	SEVERE - DEPTH TO ROCK			SLIGHT
Local Roads & Streets	15-30%: SEV. - SLOPE, D.T.R.	15-50%: SEV. - SLOPE, D.T.R.	15-30%: SEV. - D.T.R., SLOPE			
Roadfill	SEVERE - DEPTH TO ROCK, LOW S.	SEVERE - DEPTH TO ROCK	SEVERE - LOW STRENGTH, P.T.R			MODERATE. FLOODS
Sand	15-30% - SEV - SLOPE, D.T.R, L.S.	15-50%: SEV - SLOPE, D.T.R.	15-30%: SEV. - SLOPE, L.S., D.T.R			LOW STRENGTH, FROST ACTION
Gravel	POOR - AREA RECLAIM	POOR - AREA REC., LOW ST., THIN L.	POOR - DEPTH TO ROCK, LOW ST.			FAIR - LOW STRENGTH
Pond Reservoir Area	LOW STRENGTH, THIN LAYER	25-50%: POOR - SLOPE A.R., L.S., T.L.	25-30%: POOR - SLOPE, D.T.R, L.S.			
Embankments, Dikes, Levees	IMPROBABLE - EXCESS FINES	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER			IMPROBABLE - EXCESS FINES
	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER			IMPROBABLE - EXCESS FINES
	SEVERE - DEPTH TO ROCK	SEVERE - DEPTH TO ROCK	SEVERE - DEPTH TO ROCK			3-4%: MODERATE - SLOPE
	8-30%: SEV. - D.T.R., SLOPE	15-50%: SEV. - SLOPE, D.T.R.	8-30%: SEV. - DEPTH T.R., SLOPE			SEVERE - PONDING
	SEVERE - THIN LAYER	SEVERE - THIN LAYER	SEVERE - THIN LAYER			

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY			SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE			
	ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX		Herb Plts	Wood Plts	Shrubs
2.10 Punchbowl, moist		Utah Juniper			Poor	V. Poor	Poor
2.20 Segura		Pinyon Pine, Utah Juniper			Poor	V. Poor	Poor
2.30 Locane		Pinyon Pine, Utah Juniper			Poor	V. Poor	Poor
2.40 Rock Outcrop, andesite		-			-	-	-
2.50 Coarse loamy mixed frigid Aridic and Pachic Haploxerolls		NONE			V.P.	V.P.	V.P.
2.60 Course-loamy, mixed (calcareous), frigid Xeric Torriorthents, flooded		NONE			Fair	Fair	Fair

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS					
		2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
bluebunch wheatgrass	AGSP	10	5	5		20	
Thurber needlegrass	STTH2	5	15	15		15	
needle and thread	STCO4	5					
Indian ricegrass	ORHY	2				5	
sandberg bluegrass	POSE	3				2	
pine bluegrass	POSC		6	6		2	
basin wildrye	ELCI2		2	2		2	40
bottlebrush squirreltail	SIHY					2	
Nevada bluegrass	PONE						5
Western wheatgrass	AGSM						2
slender wheatgrass	AGTR						2
other perennial grasses	PPG6	5	2	2			20
other perennial forbs	PPF	10	10	10		15	15
other annual forbs	AAFF	5					
basin big sagebrush	ARTRT						8
Spreading horsebrush	TECA2					1	
Serviceberry	AMAL2					2	
rubber rabbitbrush	CHNA					2	
Mtn. big sagebrush	ARTRV		30	30			
Wyoming big sagebrush	ARTR1		10	10		25	
Douglas rabbitbrush	CHVI8		5	5		2	
snowberry	SYMPH		5	5			
black sagebrush	ARNO	20					
antelope bitterbrush	PUTR2	5					
little leaf mountain mahogany	CELE17	5					
cliffrose	COME5	5					
ephedra	EPHED	5					
other shrubs	SSSS	10	10	10			7
Utah juniper	JUOS	5					
RANGE SITE NAME OR NUMBER		Juniper savannah	P/J big sage	P/J big sage		Loamy 10-12"	Loamy bottom 5-12"
POTENTIAL PRODUCTION LBS. AC. ORY WT. FAVORABLE YEARS		500	900	900		900	2600
NORMAL YEARS		300	600	600			1700
UNFAVORABLE YEARS		250	300	300		500	800

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2:

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY

362

USDA-SCS

SOIL SURVEY AREA: Nye Co - Sevenmile Wash Area MLRA: 28 DATE: Nov. 1/30/80 BY: TLS LMS

SOIL MAP UNIT SYMBOL AND NAME: Punchbowl - Locane - Pedoli Association - 362

1.00 SETTING Andesitic hills and mountains with a few small drainageways and terrace remnants. APP - 11 to 16", AAAT 41 to 47° F., FFS - 80 days, Elev. 6,600' to 8,200'; most ppt falls in the winter + spring

2.00 MAP UNIT COMPOSITION

MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10 Punchbowl - sandy loam, 15 to 50 percent slopes, moist - Loamy, mixed, frigid Lithic Xerollic Haplargids	50	15 to 50 percent slopes; sideslopes of andesitic hills and mountains; residuum	Juniper Savanna
2.20 Locane extremely stony loam, 15 to 50 percent slopes - Clayey-skeletal, montmor. Mesic, frigid Lithic Xerollic Haplargids	22	15 to 50 percent slopes; sideslopes of andesitic hills and mountains; residuum	PJS - big sagebrush understory Pinyon & blue wildrye
2.30 Pedoli sandy loam, 4 to 15 percent slopes, moist - Fine, mix, mesic Xerollic Haplargids	15	4 to 15 percent slopes; terrace remnants; alluvium	big sagebrush

CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40 Loamy, mixed, frigid, shallow Aridic Durargids and Durargids	8			4 to 15 percent slopes; terrace remnants	dur. pans, black sagebrush vegetation
2.50 Coarse-loamy, mixed, frigid Xeric Torriorthents and Xerollic Camborthids	5			2 to 8 percent slopes; drainageways	deep, coarse-loamy control section occasional flooding
2.60					

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Punchbowl sandy loam, 15 to 50 percent slopes, moist

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-3	SL	0	0	SM-SC, SM	A-2-4, A-4	1, F, GR	SO	VFR	7.4-7.8		
3-7	SCL	0	0	SM-SC, SM	A-4, A-6	2, M, SBK	H	F	7.9-8.4		
7-11	GR-C	0	30	CL, ML	A-7-6, A-6	M	VH	VFI	7.9-8.4		
11+	R	0	0								

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-3	2.0-6.0	.11-.13		LOW	.37	1	D	NONE	-	-	>6.0	-	-
3-7	0.2-0.6	.14-.16		MODERATE									
7-11	.06-0.2	.11-.13		MODERATE									
11+													

EROSION HAZARD WIND EROD. GRP.	EROSION HAZARD WATER	CORROSIVITY WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
3	HIGH	HIGH	HIGH	LOW	MODERATE	10-20	-	AARD

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10: Lithic Xeric Torriorthents, loamy, mixed, frigid

3.20 MAJOR COMPONENT NAME: Locane extremely stony loam, 15 to 50 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED GC	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-4	STX-L	71	85	GW-GM, GP-GC, GR-GC	A-2-4	1, M, SBK	SO	FR	7.4-7.8		
4-8	CBV-SIL	20	35	CL-ML, ML	A-4		H	FI	6.6-7.2		
8-16	CBV-CL	20	35	GC	A-6	M	SH	VFR	6.6-7.2		
16+	R										

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-4	0.6-2.0	.03-.04		LOW	.28	1	D	NONE	-	-	>5.0	-	-
4-8	0.6-2.0	.11-.13		LOW									
8-16	0.2-0.6	.11-.13		MODERATE									
16+													

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
5	HIGH	MODERATE	MODERATE	LOW	LOW	10-20	-	HARD

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20: Lithic Argixerolls and Lithic Haploxerolls, loamy and loamy-skeletal, mixed, frigid

3.30 MAJOR COMPONENT NAME: Pedoli sandy loam, 4 to 15 percent slopes, moist

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-4	SL	0	0	SM	A-4, A-2-4	2, VC, PL, F 2C, PR	SO	VFR	7.9-8.4		
4-25	CL, L	0	0	ML, CL, CL-ML	A-4, A-6	2, M, FC, SBK	H, SH	FI, FR	7.9-8.4		
25-46	FSL	0	0	SM, SM-SC	A-4	M	SH	VFR	7.9-8.4		
46-60	LFS	0	0	SM	A-2-4	M	SO	VFR	7.9-8.4		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-4	2.0-6.0	.11-.13		LOW	.24	5	B	NONE	-	-	>5.0	-	-
4-25	0.2-0.6	.18-.20		MODERATE									
25-46	2.0-6.0	.13-.15		LOW									
46-60	6.0-20	.09-.10		LOW									

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
3	LOW-MOD	HIGH	HIGH	LOW	MODERATE	-	-	-

3.31 NONCONTRASTING INCLUDED SOILS WITH 3.30: Xeric Torriorthents on sideslopes

Estimates

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.) W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE

G	Gravel
SG	Sandy gravel
S	Sand
COS	Coarse sand
FS	Fine sand
VFS	Very fine sand
LCOS	Loamy coarse sand
LS	Loamy sand
LFS	Loamy fine sand
LVFS	Loamy very fine sand
COSL	Coarse sandy loam
LS	Sandy loam
FSL	Fine Sandy Loam
VFSL	Very fine sandy loam
SIC	Silty Clay
C	Clay
SICL	Silty clay loam
CL	Clay loam
L	Loam
SIL	Silt loam
SCL	Sandy clay loam
UWB	Unweathered bedrock
WB	Weathered bedrock

HORIZON TEXTURE MODIFIERS

CB	Cobbly
CBA	Angular Cobbly
CBV	Very cobbly
FL	Flaggy
GR	Gravelly
GRC	Coarse gravelly
GRF	Fine gravelly
GRV	Very gravelly
SR	Stratified
ST	Stony
STV	Very stony
STX	Extremely stony

STRUCTURE

SG	Single grain
1	Weak
2	Moderate
3	Strong
VF	Very fine
F	Fine
M	Medium
C	Coarse
VC	Very coarse
GR	Granular
CR	Crumb
PL	Platy
PR	Prismatic
ABK	Angular Blocky
SBK	Subangular blocky
M	Massive

CONSISTENCE

Dry:

LO	Loose
SO	Soft
SH	Slightly hard
H	Hard
VH	Very hard
EH	Extremely hard

Moist:

LO	Loose
VFR	Very friable
FR	Friable
FI	Firm
VFI	Very firm
EFI	Extremely firm

SOIL MAP UNIT INTERPRETATION - ORDER - 3

USDA-SCS

SOIL MAP UNIT SYMBOL AND NAME: Punchbowl - Locane - Pedoli Tx. Association - 362

PRESENT MAJOR LAND USES: Range

POTENTIAL FORESEEABLE USES: see below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR.			4c			
NIRR.	7s	7s		6s	6e	
SUITABILITY FOR RANGE SEEDING	VERY POOR - ROOT ZONE, AWC	VERY POOR ROOT ZONE, AWC, COARSE FRAGMENTS	POOR - PRECIPITATION			
	30-50%; V. POOR - SLOPE, R.Z. AND					
Shallow Excavations	SEVERE - DEPTH TO ROCK	SEVERE - DEPTH TO ROCK	SEVERE - CUTBANKS			
	15-50%; SEV. - SLOPE, D.T.R.	15-50%; SEV. - D.T.R., SLOPE	CAVE			
Local Roads + Streets	SEVERE DEPTH TO ROCK, LOW ST.	SEVERE - LOW STRENGTH, D.T.R.	SEVERE - LOW STRENGTH			
	15-50%; SEV. - SLOPE, D.T.R., L.S.	15-50% SEV. - SLOPE, L.S., D.T.R.				
Roadfill	POOR - AREA REC., LOW S., THIN L.	POOR - DEPTH TO ROCK, LOW ST.	FAIR - LOW STRENGTH			
	25-50%; POOR - SLOPE, A.R., L.S.	25-50% POOR - SLOPE, D.T.R., L.S.				
Sand	IMPROBABLE - EXCESS	IMPROBABLE - EXCESS	IMPROBABLE - EXCESS			
	FINES, THIN LAYER	FINES, THIN LAYER	FINES, THIN LAYER			
Gravel	IMPROBABLE - EXCESS	IMPROBABLE - EXCESS	IMPROBABLE - EXCESS			
	FINES, THIN LAYER	FINES, THIN LAYER	FINES, THIN LAYER			
Pond Reservoir Area	SEVERE - DEPTH TO ROCK	SEVERE - DEPTH TO ROCK	SEVERE - SEEPAGE			
	15-50%; SEV. - D.T.R., SLOPE	15-50% SEV. - DEPTH T. R., SLOPE	9-15%; SEV. - SLOPE, SEEP.			
Embankments, Dikes, Levees	SEVERE - THIN LAYER	SEVERE - THIN LAYER	SEVERE - THIN LAYER			
			PIPING			

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY			SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE				
	ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX	GRAIN & SEED CROPS	DOMESTIC GRASSES & LEGUMES	WILD HERB. PLANTS	CONIFEROUS PLANTS	SHRUBS
2.10 Punchbowl, moist		~~Pinyon Pine~~ Utah Juniper				POOR	V. POOR	POOR
2.20 Locane		Pinyon Pine, Utah Juniper				POOR	V. POOR	POOR
2.30 Pedoli, moist		NONE		V. POOR	V. POOR	FAIR		FAIR
2.40 Loamy, mixed, frigid shallow Haploxerollic Durorthids and Durargids		NONE				FAIR		FAIR
2.50 Coarse-loamy, mixed, frigid Xeric Torriorthents and Xerollic Camborthids		NONE				FAIR		FAIR
2.60								

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS					
		2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
bluebunch wheatgrass	AGSP	10	5	20	2	20	
Thurber needlegrass	STTH2	5	15	15		15	
needle and thread	STCO4	5			10		
Indian ricegrass	ORHY	2		5	12	5	
Sandberg bluegrass	POSE	3		2		2	
Pine bluegrass	POSC		6	2	6	2	
beardless wildrye	ELGL2		2	2		2	
bottlebrush squirreltail	SIHY			2		2	
bud sagebrush	ARSPS				7		
other perennial grasses	PPGG	5	2		10		
other perennial forbs	PPFF	10	10	15	15	15	
other annual forbs	AAFF	5					
Winterfat	EULA5				7		
fourwing saltbush	ATCA2				3		
rubber rabbitbrush	CHNA			2		2	
serviceberry	AMAL2			2		2	
spineless horsebrush	TECA2			1		1	
Mtn. big sagebrush	ARTRV		30	25		25	
Wyoming big sagebrush	ARTRW		10				
Douglas rabbitbrush	CHVI8		5	2	2	2	
snowberry	SYMPH		5				
black sagebrush	ARARN	20			25		
gotelong turpentinebush	PUTR2	5					
littleleaf mahogany	CELE3	5					
Cliffrose	COMES	5					
ephedra	EPHED	5					
other shrubs	SSSS	10	10				
Utah juniper	JUOS	5					
RANGE SITE NAME OR NUMBER		Juniper Savannah	P/J big Sage	Loamy 10-12"	Shallow Loamy PZ	Loamy 10-12"	
POTENTIAL PRODUCTION LBS. AC. DRY WT. FAVORABLE YEARS		500	900	900	650	900	
NORMAL YEARS		300	600		350		
UNFAVORABLE YEARS		250	300	500	175	500	

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2:

363

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY

USDA-SCS

SOIL SURVEY AREA: Nye Co. - Sevenmile Wash Area MLRA: 28 DATE: BY:

SOIL MAP UNIT SYMBOL AND NAME: Punchbowl - Fishlake Association - 363 Revised 11/30/80 CLS DMS

1.00 SETTING Upland Hills and Mountains

APP: 11 to 16", AAMT - 41 to 47° F, FFS - 80, Elev 6,600' to 8,200'; most ppt falls in the winter & spring

2.00 MAP UNIT COMPOSITION

	MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10	Punchbowl sandy loam, 8 to 30 percent slopes - loamy, mixed, frigid Lithic Xerollic Haplargids	50	8 to 30 percent slopes; backslopes and shoulders of upland hills and mountains; residuum	black sagebrush, needleandthread, Indian ricegrass, mustard
2.20	Fishlake loam, 8 to 15 percent slopes - loamy, mixed, frigid shallow Xerollic Durargids	40	8 to 15 percent slopes; footslopes of hills and mountains; alluvium	black sagebrush, Indian ricegrass, needleandthread
2.30				

	CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40	Rock Outcrop, andesite	5				
2.50	Loamy-skeletal, mixed, frigid Lithic Xerollic Haplargids, moist, 8 to 30 percent slopes	3			8 to 30 percent slopes; intermingled among areas of Punchbowl; backslopes and shoulders of hills; residuum	Loamy-skeletal control section; no duripan
2.60						

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Diona

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-3	SL	0	0	SM-SC, SM	A-2-4, A-4	1, F, GR	SO	VFR	7.4-7.8		
3-7	SCL	0	0	SM-SC, SM	A-4, A-6	2, M, SBK	H	FI	7.9-8.4		
7-11	GR-C	0	30	CL, ML	A-7-6, A-6	M	VH	VFI	7.9-8.4		
11+	R	0	0								

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-3	20-6.0	.11-.13		LOW	.37								
3-7	0.2-0.6	.14-.16		MODERATE		1	D	NONE	—	—	25.0	—	—
7-11	.06-0.2	.11-.13		MODERATE									
11+													

	EROSION HAZARD WIND	EROSION HAZARD WATER	CORROSIVITY WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK THICKNESS	CEMENTED PAN OR BEDROCK HARDNESS
EROD. GRP.	3	HIGH-MOD.	HIGH	HIGH	LOW	MODERATE	10-20	—	HARD

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10: Lithic Xeric Torriorthents, loamy, mixed, frigid

3.20 MAJOR COMPONENT NAME: Fishlake loam 8 to 15 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-5	SL	0	0	SM	A-4, A-2-4	1, C, PL	SO	VFR	6.6-7.3		
5-10	CL	0	0	ML, CL	A-6, A-4	2, M, SBK	SH	VFR	6.6-7.3		
10-18	L	0	0	ML, CL, CL-ML	A-6, A-4	2, M, SBK	SH	VFR	7.4-7.8		
18+	IND					M	EH	EFI	7.9-8.4		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-5	2.0-6.0	.14-.16		LOW	.30								
5-10	0.2-0.6	.19-.21		MODERATE		1	D	NONE	-	-	>5	-	-
10-16	0.6-2.0	.16-.18		MODERATE									
18+													

	EROSION HAZARD WIND	EROSION HAZARD WATER	CORROSIVITY WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK THICKNESS	CEMENTED PAN OR BEDROCK HARDNESS
EROD. GRP.	3	LOW-MODERATE	HIGH	HIGH	LOW	MODERATE	10-20	THICK	—

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20:

3.30 MAJOR COMPONENT NAME:

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS

	EROSION HAZARD WIND	EROSION HAZARD WATER	CORROSIVITY WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK THICKNESS	CEMENTED PAN OR BEDROCK HARDNESS
EROD. GRP.									

3.31 NONCONTRASTING INCLUDED SOILS WITH 3.30:

Footnotes:

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.) W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE

G	Gravel
SG	Sandy gravel
S	Sand
COS	Coarse sand
FS	fine sand
VFS	Very fine sand
LCOS	Loamy coarse sand
LS	Loamy sand
LFS	Loamy fine sand
LVFS	Loamy very fine sand
COSL	Coarse sandy loam
LS	Sandy loam
FSL	Fine Sandy Loam
VFSL	Very fine sandy loam
SIC	Silty Clay
C	Clay
SICL	Silty clay loam
CL	Clay loam
L	Loam
SIL	Silt loam
SCL	Sandy clay loam
UWB	Unweathered bedrock
WB	Weathered bedrock

HORIZON TEXTURE MODIFIERS

CB	Cobbly
CBA	Angular Cobbly
CBV	Very cobbly
EL	Flaggy
GR	Gravelly
GRC	Coarse gravelly
GRF	Fine gravelly
GRV	Very gravelly
SR	Stratified
ST	Stony
STV	Very stony
STX	Extremely stony

STRUCTURE

SG	Single grain
1	Weak
2	Moderate
3	Strong
VF	Very fine
F	Fine
M	Medium
C	Coarse
VC	Very coarse
GR	Granular
CR	Crumb
PL	Platy
PR	Prismatic
ABK	Angular blocky
SBK	Subangular blocky
M	Massive

CONSISTENCE

Dry:

LO	Loose
SO	Soft
SH	Slightly hard
H	Hard
VH	Very hard
EH	Extremely hard

Moist:

LO	Loose
VFR	Very friable
FR	Friable
FI	Firm
VFI	Very firm
EFI	Extremely firm

SOIL MAP UNIT INTERPRETATION - ORDER - 3

USOA-SCS

SOIL MAP UNIT SYMBOL AND NAME: 363 - Punchbowl-Fishlake Association

PRESENT MAJOR LAND USES: Range

POTENTIAL FORESEEABLE USES: see below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.60	2.60
CAPABILITY SUBCLASS- IRR.		6s				
NIRR.	7s	7s		8	6s	
SUITABILITY FOR RANGE SEEDING	VERY POOR - ROOT ZONE	VERY POOR - ROOT ZONE, AWC				
Shallow Excavations	SEVERE - CEMENTED PAN	SEVERE - CEMENTED PAN				
Local Roads & Streets	SEVERE - CEMENTED PAN, LOW STRENGTH.	SEVERE - CEMENTED PAN, LOW STRENGTH				
Roadfill	POOR - THIN LAYER, LOW STRENGTH	POOR - ARTI MECLAIM, LOW STRENGTH				
Sand	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER				
Gravel	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER				
Pond Reservoir	SEVERE - CEMENTED PAN	SEVERE - CEMENTED PAN, 8-15% SEV. - SLOPE, C.P.				
Embankments, Dikes, Leeves	SEVERE - THIN LAYER PIPING	SEVERE - THIN LAYER				

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY			SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE				
	ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX			Herb PH	Conif PH	Shrubs
2.10 Punchbowl		NONE				Poor		Poor
2.20 Fishlake		NONE				Poor		Poor
2.30								
2.40 Rock Outcrop, andesite								
2.50 Loamy-skeletal, mixed frigid Lithic Xerollic Haplargids, moist		Utah Juniper				V.P.	V. POOR	V.P.
2.60						V.P.		V.P.

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS					
		2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
						See footnote	
basin wildrye	ELCI2	1-5	2-5				
blue bunch wheatgrass	AGSP	5-10	5-10			10	
blue grama	BOGR2	-	1-5				
bottle brush squirreltail	SITA	-	1-5				
galleta	HIJA	-	1-5				
Indian rice grass	ORHY	5-10	5-10				
Needle and thread	STCO4	5-10	2-5			2	
Sand dropseed	SPCR	1-5	1-5			5	
Sandberg bluegrass	POSE	1-5	1-5				
Thurbers needlegrass	STTHZ	-	1-5			5	
western wheatgrass	AGSM	-	-				
buckwheat	ERIOG	1-2	-				
globemallow	SPHAE	1-2	-				
penstemon	PENST	1-2	1-2				
princes plume	STANL	1-2	1-2				
black sagebrush	ARNO	20-25	20-30			20	
bud sagebrush	ARSPS	2-5	1				
Cacti		1-5	1-2				
ephedra	EPHED	1-5	1-2			5	
Fourwing Saltbush	ATCA2	2-5	1-2				
little leaf horse brush	TEGL	1-5	1-2				
Wyoming big sagebrush	ARTRW	-	1-2				
Snowberry rabbitbrush	CHVI5	1-5	2-5				
mountain mahogany	CERCO	-	-				
shadscale	ATCO	-	1-2				
Cliffrose	COMES	5-10	-			5	
Winter-fat	EULA5	1-5	-				
Mountain big sagebrush	ARTRV	1-5	-				
milkvetch	ASTRA	-	1-2				
Phlox	PHLOX	1-2	1-2				
RANGE SITE NAME OR NUMBER		NV-D28-116	Shallow Loam R-12			Juniper Savannah 11-16	
POTENTIAL PRODUCTION LBS. AC. DRY WT. FAVORABLE YEARS		500	775			500	
POTENTIAL PRODUCTION LBS. AC. DRY WT. NORMAL YEARS		270	460			300	
POTENTIAL PRODUCTION LBS. AC. DRY WT. UNFAVORABLE YEARS		175	225			250	

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2: * 2.50 Utah juniper JUOS - 5%; other shrubs 5555 10%, Utah leaf mtn mahogany CELE12 - 5%, antelope bitterbrush PUTR2 - 5%, other annual forbs AAFF 5%, other perennial forbs PPFF - 10%, other perennial grasses PPGG 5%.

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY

USDA-SCS

MLRA: 28 DATE: 4-1-80 BY: RPZ

SOIL SURVEY AREA:

SOIL MAP UNIT SYMBOL AND NAME: 364 (Snowball Ranch Area) Punchbowl - Locane association

1.00 SETTING Hills and mountains composed of sideslopes, tops, terrace remants and dramageways

NP - 11+-16", AAAT - 41 to 47°F, FFS - 80 days, Elev. 6,600' to 8,200', most ppt. falls in the winter + spring

2.00 MAP UNIT COMPOSITION

MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10 Punchbowl - sandy loam, 8 to 50 percent slopes (Lithic Xerollic Haplargids, loamy, mixed, frigid)	45	Hilltops and sideslopes. Soils developed in residuum of weathered andesitic rock.	Shallow hill. Mostly black sagebrush
2.20 Punchbowl sandy loam, 15 to 50 percent slopes, moist (Lithic Xerollic Haplargids, loamy, mixed, frigid)	25	Sideslopes of hills. Soils developed in residuum of weathered andesitic rock	Juniper, savannah
2.30 Locane extremely stony loam, 15 to 50 percent slopes (Lithic Xerollic Haplargids, clayey-skeletal, montmorillonitic, frigid)	15	North and west sideslopes. Soils developed in residuum of weathered andesitic rock.	P/J (Big Sagebrush)

CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, SHAPE OF UNIT, AND SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40 Pajaki sandy loam, 4 to 8 percent slopes (Fine loamy, mixed, frigid Xerollic Haplargids)	16	1	10	Terrace remnants in small rolls, irregularly shaped, convex slopes	Big sagebrush
2.50 Screwnick silt loam, 2 to 4 percent slopes (Fine-loamy, mixed, frigid Torrifluventic Haploxerolls)	3	.5	10	Major drainageways, linear bodies, U-shaped drainageways	Lower, better, occasional flooding
2.60 Four Star sandy loams, 0 to 4 percent slopes (Coarse-loamy, mixed, frigid Cumulic Haplaquolls)	2	.5	3	Small riparian meadows and seep areas, lower or rounded areas	Wet meadow. High water table

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Punchbowl - sandy loam, 8 to 50 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-3	SL	0	0	SM-SC, SM	A-2-4, A-4	1, F, GR	SO	VFR	7.4-7.8		
3-7	SCL	0	0	SM-SC, SM	A-4, A-6	2, M, SBK	H	FI	7.9-8.4		
7-11	GR-C	0	30	CL, ML	A-7-6, A-6	M	VH	VFI	7.9-8.4		
11+	UWB	0	0								

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-3	2.0-6.0	.11-.13		LOW	.37	1	D	NONE	—	—	26.0	—	—
3-7	0.2-0.6	.14-.16		MODERATE									
7-11	.06-0.2	.11-.13		MODERATE									
11+													

EROSION HAZARD WIND ERODE. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
GRP. 3	MOD-HIGH	HIGH	HIGH	LOW	MODERATE	10-20	—	HARD

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10: Rocktree and Durmagide, shallow, Lithic Xeric Torriorthents, loamy, mixed, frigid.

3.20 MAJOR COMPONENT NAME: Punchbowl sandy loam, 15 to 50 percent slopes, moist

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-3	SL	0	0	SM-SC, SM	A-2-4, A-4	1, F, GR	SO	VFR	7.4-7.8		
3-7	SCL	0	0	SM-SC, SM	A-4, A-6	2, M, SBK	H	FI	7.9-8.4		
7-11	GR-C	0	30	CL, ML	A-7-6, A-6	M	VH	VFI	7.9-8.4		
11+	UWB	0	0								

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-3	2.0-6.0	.11-.13		LOW	.37	1	D	NONE	—	—	26.0	—	—
3-7	0.2-0.6	.14-.16		MODERATE									
7-11	.06-0.2	.11-.13		MODERATE									
11+													

EROSION HAZARD WIND ERODE. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
GRP. 3	MOD-HIGH	HIGH	HIGH	LOW	MODERATE	10-20	—	HARD

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20: Lithic Xeric Torriorthents, loamy, mixed, frigid

3.30 MAJOR COMPONENT NAME: Locane extremely stony loam, 15 to 50 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-4	STX-L	71	55	GM-GC, GP-GC, GM-GC	A-2-4	1, M, SBK	SO	FR	7.4-7.8		
4-8	CBV-SIL	20	35	CL-ML, ML	A-4	M	H	FI	6.6-7.2		
8-16	CBV-CL	20	35	GC	A-6	M	SH	VFR	6.6-7.2		
16+	R										

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-4	0.6-2.0	.03-.04		LOW	.28	1	D	NONE	—	—	>5.0	—	—
4-8	0.6-2.0	.11-.13		LOW									
8-16	0.2-0.6	.11-.13		MODERATE									
16+													

EROSION HAZARD WIND ERODE. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
5	HIGH	MODERATE	MODERATE	LOW	LOW	10-20	—	HARD

3.31 NONCONTRASTING INCLUDED SOILS WITH 3.30: Lithic Argixerolls and Haploxerolls, loamy and loamy skeletal, mixed, frigid.

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.)
W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

5.00 FOOTNOTES

HORIZON TEXTURE

G	Gravel
SG	Sandy gravel
S	Sand
COS	Coarse sand
FS	Fine sand
VFS	Very fine sand
LCOS	Loamy coarse sand
LS	Loamy sand
LFS	Loamy fine sand
LVFS	Loamy very fine sand
COSL	Coarse sandy loam
LS	Sandy loam
FSL	Fine Sandy Loam
VFSL	Very fine sandy loam
SIC	Silty Clay
C	Clay
SICL	Silty clay loam
CL	Clay loam
L	Loam
SIL	Silt loam
SCL	Sandy clay loam
UWB	Unweathered bedrock
WB	Weathered bedrock

HORIZON TEXTURE MODIFIERS

CB	Cobbly
CBA	Angular Cobbly
CBV	Very cobbly
FL	Flaggy
GR	Gravelly
GRC	Coarse gravelly
GRF	Fine gravelly
GRV	Very gravelly
SR	Stratified
ST	Stony
STV	Very stony
STX	Extremely stony

STRUCTURE

SG	Single grain
1	Weak
2	Moderate
3	Strong
VF	Very fine
F	Fine
M	Medium
C	Coarse
VC	Very coarse
GR	Granular
CR	Crumb
PL	Platy
PR	Prismatic
ABK	Angular blocky
SBK	Subangular blocky
M	Massive

CONSISTENCE

Dry:

LO	Loose
SO	Soft
SH	Slightly hard
H	Hard
VH	Very hard
EH	Extremely hard

Moist:

LO	Loose
VFR	Very friable
FR	Friable
FI	Firm
VFI	Very firm
EFI	Extremely firm

SOIL MAP UNIT INTERPRETATION - ORDER - 3

USDA-SCS

SOIL MAP UNIT SYMBOL AND NAME: 364 Punchbowl - Locane association
PRESENT MAJOR LAND USES: Range, Woodland, and Wildlife Habitat
POTENTIAL FORESEEABLE USES: Same as present

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.60
				4c	4e	3w
CAPABILITY SUBCLASS- IRR. / NIRR.	7s	7s	7s			
SUITABILITY FOR RANGE SEEDING	VERY POOR- ROOT ZONE, AWC, 30-50%: slope	VERY POOR- ROOT ZONE, AWC, 30-50%: slope	VERY POOR- ROOT ZONE, AWC 30-50%: V. POOR-SLOPE, R.Z, AWC			
Shallow Excavations	SEVERE- DEPTH TO ROCK	SEVERE- DEPTH TO ROCK	SEVERE- DEPTH TO ROCK			
Local Roads & Streets	15-50%: SEV.-SLOPE, D.T.R.	15-50%: SEV.-SLOPE, D.T.R.	15-50%: SEV.-SLOPE, D.T.R.			
Road fill	SEVERE- DEPTH TO ROCK, LOW S.	SEVERE- DEPTH TO ROCK, LOW S.	SEVERE- DEPTH TO ROCK			
Sand	15-50%: SEV.-SLOPE, D.T.R, L.S.	15-50%: SEV.-SLOPE, D.T.R, L.S.	15-50%: SEV.-SLOPE, D.T.R.			
Gravel	POOR- AREA RECLAIM	POOR- AREA RECLAIM	POOR-AREA RCC, LOW ST, THIN L.			
Pond Reservoir	LOW STRENGTH, THIN LAYER	LOW STRENGTH, THIN LAYER	25-50%: POOR-SLOPE, A.R., L.S., T.L.			
Embankments, Dikes & L.	IMPROBABLE- EXCESS	IMPROBABLE- EXCESS	IMPROBABLE- EXCESS			
	FINES, THIN LAYER	FINES, THIN LAYER	FINES, THIN LAYER			
	IMPROBABLE- EXCESS	IMPROBABLE- EXCESS	IMPROBABLE- EXCESS			
	FINES, THIN LAYER	FINES, THIN LAYER	FINES, THIN LAYER			
	SEVERE- DEPTH TO ROCK	SEVERE- DEPTH TO ROCK	SEVERE- DEPTH TO ROCK			
	8-50%: SEV.-D.T.R., SLOPE	8-50%: SEV.-D.T.R., SLOPE	15-50%: SEV.-SLOPE, D.T.R.			
	SEVERE- THIN LAYER	SEVERE- THIN LAYER	SEVERE- THIN LAYER			

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY			SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE				
	ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX	Wild Herb Plts	Conif Plts	Shrubs	Wetl. PH	Shall. Water
2.10 Punchbowl		NONE		Poor	—	Poor	—	—
2.20 Punchbowl, moist		UTAH JUNIPER		Poor	Poor	Poor	—	—
2.30 Locane		PINYON PINE UTAH JUNIPER		Poor	V. Poor	Poor	—	—
2.40 Pedoli, moist		NONE		Fair	—	Fair	—	—
2.50 Sevenmile		NONE		Fair	—	Fair	—	—
2.60 Fourstar		NONE		Good	—	Good	Good	Fair

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS					
		2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
						See Footnotes	See Footnotes
Indian ricegrass	ORHY	12	2		5		
needle and thread	STCO4	8	5				
bottlebrush squirreltail	SIHY	2			2		
pine bluegrass	POSC	6		6	2		
bluebunch wheatgrass	AGSP		10	5	20		
Thurber needlegrass	STTH2		5	15	15		
Sandberg bluegrass	POSE		3		2		
basin wildrye	ELCI7		2		2	40	
Nevada bluegrass	PONE					5	
western wheatgrass	AGSM					3	
basin big sagebrush	ARTRT					8	2
rubber rabbitbrush	CHNA				2		
other grasses	PPG6	7	5	2		20	20
Forbs	PPFF	15	10	10	15	15	10
Utah juniper	JUOS		5				
other annual forbs	AAFF		5				
Serviceberry	AMAL2				2		
Spiceless horsebrush	TECA2				1		
Mtn. big sagebrush	ARTRV			30	25		
Wyoming big sagebrush	ARTRW			10			
Snowberry	SYMPH			5			
antelope bitterbrush	PUTR2		5				
littleleaf mountain mahogany	CELE12		5				
cliffrose	CUMES		5				
black sagebrush	ARARN	20	20				
fourwing saltbush	ATCA2	5					
bud sagebrush	ARSP5	3					
ephedra	EPHED	5	5				
Douglas rabbitbrush	CHVI8	2		5	2		
other shrubs	SSSS	15	10	10		7	4
RANGE SITE NAME OR NUMBER		Shallow hill 8-12"	Juniper Savannah 11-16"	P/J big sage	Loamy 10-40"	Loamy bottom 5-12"	Wetmeadow 5-12"
POTENTIAL PRODUCTION LBS. AC. DRY WT. FAVORABLE YEARS		500	500	900	900	2600	
NORMAL YEARS		270	300	600		1700	
UNFAVORABLE YEARS		175	250	300	500	800	

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2: 2.50 sandreed wheatgrass AGTR 2%; 2.60 rushes JUNCA - 25%; alkali sacaton SPAI 12%; inland saltgrass DIST 5%; sedges CAREX 10%; alkali cordgrass SPGR 5%; willow SALIX 2%; wildrose ROSA 2%

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY

371

USDA-BOS

SOIL SURVEY AREA: Nye Co - Sevenmile Wash Area MLRA: 28 DATE: BY:

SOIL MAP UNIT SYMBOL AND NAME: Four Star - Sevenmile association - 371 Rev. 11/20/80 PES, DMS

1.00 SETTING: Drainageways in the mountains and mtn terraces; Aquic moisture regime is a result of spring activity in the area.

MAP - 11 to 16", MAAT - 41 to 47° F, FFS - 80 days, Elev. - 6,600' - 8,200', most ppt. falls in the winter & spring

2.00 MAP UNIT COMPOSITION

	MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10	Four Star sandy loam, 0 to 2 percent slopes; Coarse loamy, mixed frigid Cumulic Haplaquolls	70	0-2% slopes, drainageways; alluvium	alkali sacaton, inland saltgrass, alkali cordgrass, sedges
2.20	Sevenmile silty loam, 0 to 4 percent slopes; Coarse loamy, mixed frigid Torriorthentic Haplocerolls	15	0-4% slopes, drainageways and toe slopes of alluvial material adjacent to the drainageway (floodplain)	basin wildrye, big sagebrush
2.30				

	CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40	Applebush sandy loam, 2 to 4 percent slopes; Coarse loamy, mixed, frigid Xerollic Camborthids	3			2-4% drainageways & adjacent toe slopes of fans; alluvium	cambic horizon, not wet; ochric epipedon
2.50	Sandy and loamy-skeletal (calcareous), frigid Xeric Torriorthents, 0 to 4 percent slopes, Eroded	2			0-4%, drainageways; alluvium	not wet; ochric epipedon
2.60						

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Four Star - Sandy loam, 0 to 2 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-6	SL	0	0	SM, SM-SC	A-4, A-2-4	2,M,CR	SO	VFR	6.6-7.3		
6-36	L	0	0	ML, CL-ML	A-4	2,M,ABK	SO	VFR	6.6-7.3		
36-39	COSL	0	0	SM, SM-SC	A-2-4	M	SO	FR	6.1-6.5		
39-60	COS	0	0	SW-SM, SM	A-3	M	LO	LO	6.1-6.5		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-6	2.0-6.0	.11-.13		LOW	.20	5	D	FREQUENT	LONG	MAR-JUN	2.0-4.0	APPARENT	JAN-DEC
6-36	0.6-2.0	.16-.18		LOW									
36-39	2.0-6.0	.10-.12		LOW									
39-60	>20	.06		LOW									

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
2	LOW	SLIGHT	HIGH	LOW	HIGH	760	-	-

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10:

3.20 MAJOR COMPONENT NAME: Sevenmile silt loam, 0 to 4 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-20	SIL	0	0	ML	A-4	1,C,PL & 2,M,SBK	SH	FR	7.4-8.4		
20-60	SL-SCL-SIL	0	0	SM	A-4	M	SH	FR	7.4-8.4		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-20	0.6-2.0	.19-.21		LOW	.43	1	B	FREQUENT	V. BRIEF	MAR-MAY	75.0	-	-
20-60	0.6-2.0	.11-.21		LOW									

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
5	LOW-MOD.	MODERATE	LOW	LOW	MODERATE	-	-	-

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20:

3.30 MAJOR COMPONENT NAME:

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS

3.31 NONCONTRASTING INCLUDED SOILS WITH 3.30:

Footnotes

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.)
W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE

G	Gravel
SG	Sandy gravel
S	Sand
COS	Coarse sand
FS	Fine sand
VFS	Very fine sand
LCOS	Loamy coarse sand
LS	Loamy sand
LFS	Loamy fine sand
LVFS	Loamy very fine sand
COSL	Coarse sandy loam
LS	Sandy loam
FSL	Fine Sandy Loam
VFSL	Very fine sandy loam
SIC	Silty Clay
C	Clay
SICL	Silty clay loam
CL	Clay loam
L	Loam
SIL	Silt loam
SCL	Sandy clay loam
UWB	Unweathered bedrock
WB	Weathered bedrock

HORIZON TEXTURE MODIFIERS

CB	Cobbly
CBA	Angular Cobbly
CBV	Very cobbly
FL	Flaggy
GR	Gravelly
GRC	Coarse gravelly
GRF	Fine gravelly
GRV	Very gravelly
SR	Stratified
ST	Stony
STV	Very stony
STX	Extremely stony

STRUCTURE

SG	Single grain
1	Weak
2	Moderate
3	Strong
VF	Very fine
F	Fine
M	Medium
C	Coarse
VC	Very coarse
GR	Granular
CR	Crumb
PL	Platy
PR	Prismatic
ABK	Angular blocky
SBK	Subangular blocky
M	Massive

CONSISTENCE

Dry:

LO	Loose
SO	Soft
SH	Slightly hard
H	Hard
VH	Very hard
EH	Extremely hard

Moist:

LO	Loose
VFR	Very friable
FR	Friable
FI	Firm
VFI	Very firm
EFI	Extremely firm

SOIL MAP UNIT INTERPRETATION - ORDER - 3

371

USDA-SCS

SOIL MAP UNIT SYMBOL AND NAME: 371 - Four Star [illegible] - Serenmile Association

PRESENT MAJOR LAND USES: Range

POTENTIAL FORESEEABLE USES: see below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR.	3w	4e		6c	6s	
NIRR.		(1)				
SUITABILITY FOR RANGE SEEDING	FAIR - DEPTH TO SAND	FAIR (1) - PRECIPITATION		POOR - PRECIPITATION		
Shallow Excavation	SEVERE - WETNESS, CUTBANKS CAVE	MODERATE - FLOODS		SEVERE - CUTBANKS CAVE		
Local Roads & Streets	SEVERE - FLOODS, FROST ACTION	SEVERE - FLOODS		MODERATE - FROST ACTION		
Road Fill	FAIR - WETNESS	FAIR - LOW STRENGTH		GOOD		
Sand	PROBABLE	IMPROBABLE - EXCESS FINES		PROBABLE		
Gravel	IMPROBABLE - TOO SANDY	IMPROBABLE - EXCESS FINES		PROBABLE		
Pond Reservoir Area	SEVERE - SEEPAGE	SEVERE - SEEPAGE		SEVERE - SEEPAGE		
Embankments, Dikes, Leeves	SEVERE - SEEPAGE	SEVERE - PIPING		MODERATE - PIPING, SEEPAGE		

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX	SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE: Grain & Seed Crop	Dom. Grass & Leg	Wild Herb Plt		Shrubs	Wetl. Plts	Shallow Aqt
2.10 Four Star		NONE		Fair	Fair	Good		Good	Good	Fair
2.20 Serenmile		NONE		Fair	Fair	Good		Good		
2.30										
2.40 Applebush		NONE				Fair		Fair		
2.50 Sandy and coarse-loamy, mixed (calcareous) frigid Xeric Torriorthents		NONE				Var		Var		
2.60										

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS: 2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
alkali sacaton	SPAI	10-15	1-5		-	5-10	
alkali cordgrass	SPGR	2-5	-		-	-	
basin wildrye	ELCI2	1-5	30-50		-	5-15	
bulrush	SCIRP	1-5	-		-	-	
baltic rush	JURA	-	1-5		-	-	
cattail	TYLA	1-5	-		-	-	
inland saltgrass	DIST	5-10	-		-	-	
Indian ricegrass	ORHY	-	1-5		5-10	1-5	
blue grama	BOGR2	-	-		1-5	1-5	
bottlebrush squirreltail	SIHY	-	1-5		1-5	1-5	
needle and thread	STCO4	-	1-5		5-10	2-5	
sedges	CAREX	5-10	1-5		-	-	
western wheatgrass	AGSM	1-5	1-5		-	-	
dock	RUMEX	1-2	-		-	-	
balsamroot	BASA3	-	1-2		-	-	
globemallow	SPHAE	-	-		1-2	1-2	
basin big sagebrush	ARTRT	1-2	5-10		-	5-7	
wyoming big sagebrush	ARTRW	-	-		15-25	5-7	
ephedra	EPHED	-	1-2		2-5	2-5	
rubber rabbitbrush	CHNA2	1-2	1-2		1-2	-	
four wing saltbush	ATCA2	-	1-2		5-10	2-5	
spiny hopsage	GRSP	-	-		2-5	1-5	
rose	ROSA	1-2	1-2		-	-	
willow	SALIX	1-2	-		-	-	
green rabbitbrush	CHRYS9	-	-		-	5-10	
thickspike wheatgrass	AGDA	-	1-5		1-5	-	
slender wheatgrass	AGTR	-	1-5		-	-	
bluebunch wheatgrass	AGSP	-	-		5-12	1-5	
silver buffaloberry	SHAR	1-2	-		-	-	
cacti			-		1-2	1-2	
RANGE SITE NAME OR NUMBER		wet meadow 8-16"	Loamy bottom 5-12"		Loamy 5-10"	Wash 5-12"	
POTENTIAL PRODUCTION LBS. /AC. DRY WT. FAVORABLE YEARS		4,000	2,600		700	700	
NORMAL YEARS		2,000	1,250		500	400	
UNFAVORABLE YEARS		1,200	800		250	300	

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2: See range site descriptions for NV-D28-3, D28-7, and D28-9 for additional plants.

401

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY

USDA-BDB

SOIL SURVEY AREA: Sevenmile Wash Area; Nye Co | MLRA: 28 | DATE: | BY:
SOIL MAP UNIT SYMBOL AND NAME: Moonshine - Fishlake - Umil | Association - 401 | Rev. 1/30/90 PLS, DMS

1.00 SETTING

Old dissected terrace fans

AAP - 11"-14", AAAT - 45° to 47°F, FFS - 80 days, Elev. 6,000' to 7,400', most ppt falls in the winter + spring

2.00 MAP UNIT COMPOSITION

MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10 Moonshine gravelly fine sandy loam, 2 to 4 percent slopes - Clayey, montmorillonitic, frigid, shallow Abruptic Xerollic Durargids	50	2-4 % slopes; lower reaches of fans; alluvium	PJ Blue sagebrush
2.20 Fishlake sandy loam, 2 to 8 percent slopes, moist - Loamy, mixed, frigid, shallow Xerollic Durargids	20	2-8 % slopes; upper reaches of fans; alluvium	Juniper Saltbush
2.30 Umil loam, 4 to 15 percent slopes - loamy, mixed, frigid Xerollic	17	4-15 % slopes; sideslopes of fan dissections; alluvium	Blue sagebrush

CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40 Applebuck sandy loam, 2 to 4 percent slopes - Coarse loamy, mixed, frigid Xerollic Camborthids	3			2-4% U shaped, linear drainways	no argillic horizon; no duripan; coarse-loamy, control section
2.50 Punchbowl sandy loam, 4 to 15 percent slopes, moist - Loamy, mixed, frigid Lithic Xerollic Haplargids	3			4-15%, small hill areas	no duripan, shallow to bedrock Munroe series
2.60 Pedale sandy loam, 8 to 15 percent slopes, high elevation - Fine loamy, mixed, frigid Xerollic Haplargids	7			8-15% Terrace sideslopes	Duripan, argillic horizon, PJ begins

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Moonshine gravelly fine sandy loam, 2 to 4 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-2	GR-FSL	0	20	SM-SC, SM	A-4	1,VF+F SBK	SO	VFR	7.4-7.8		
2-11	CL	0	0	CL, ML	A-6, A-7-6	2,M,SBK	VH	FI	7.4-7.8		
11-16	SCL	0	0	SM-SC, SC	A-4, A-6	M	XH	XFI	7.9-8.4		
16+	IND										

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-2	2.0-6.0	.11-.12		LOW	.20	1	D	NONE	—	—	76.0	—	—
2-11	0.2-0.6	.19-.21		MOD.-HIGH									
11-16	0.2-0.6	.14-.16		MODERATE									
16+													

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
3	LOW	HIGH	HIGH	LOW	LOW	10-20	THICK	—

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10:

3.20 MAJOR COMPONENT NAME: Fishlake sandy loam, 2 to 8 percent slopes, moist

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-5	SL	0	0	SM	A-4, A-2-4	1,C,PL	SO	VFR	6.6-7.3		
5-10	CL	0	0	ML, CL	A-6, A-4	2,M,SBK	SH	VFR	6.6-7.3		
10-18		0	0	ML, CL-ML, CL	A-6, A-4	2,M,SBK	SH	VFR	7.4-7.5		
18+	IND						EH	EFI	7.9-8.4		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-5	2.0-6.0	.14-.16		LOW	.32	1	D	NONE	—	—	25.0	—	—
5-10	0.2-0.6	.19-.21		MODERATE									
10-18	0.6-2.0	.16-.18		MODERATE									
18+													

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
3	LOW-MODERATE	HIGH	MODERATE	LOW	MODERATE	10-20	THICK	—

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20:

3.30 MAJOR COMPONENT NAME: Umil loam, 4 to 15 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-3	L	0	0	ML	A-4	2,M,PL	SH	FR	7.9-9.0		
3-6	L	0	15	CL-ML, ML	A-4	1,F,CR	SH	FR	7.9-9.0		
6-13	GR-L	20	10	CL-ML, ML	A-4	M	SH	FR	7.9-9.0		
13+	IND					M	EH	EFI			

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-3	0.6-2.0	.16-.18		LOW	.43	1	D	NONE	—	—	25.0	—	—
3-6	0.6-2.0	.14-.16		LOW									
6-13	0.6-2.0	.13-.15		LOW									
13+													

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
4L	LOW-HIGH	MODERATE	LOW	LOW	MODERATE	10-14	THICK	—

3.31 NONCONTRASTING INCLUDED SOILS WITH 3.30: Footslopes

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.)
W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE

G	Gravel
SG	Sandy gravel
S	Sand
COS	Coarse sand
FS	Fine sand
VFS	Very fine sand
LCOS	Loamy coarse sand
LS	Loamy sand
LFS	Loamy fine sand
LVFS	Loamy very fine sand
COSL	Coarse sandy loam
LS	Sandy loam
FSL	Fine Sandy Loam
VFSL	Very fine sandy loam
SIC	Silty Clay
C	Clay
SICL	Silty clay loam
CL	Clay loam
L	Loam
SIL	Silt loam
SCL	Sandy clay loam
UWB	Unweathered bedrock
WB	Weathered bedrock

HORIZON TEXTURE MODIFIERS

CB	Cobbly
CBA	Angular Cobbly
CBV	Very cobbly
FL	Flaggy
GR	Gravelly
GRC	Coarse gravelly
GRF	Fine gravelly
GRV	Very gravelly
RR	Stratified
ST	Stony
STV	Very stony
STX	Extremely stony

STRUCTURE

SG	Single grain
1	Weak
2	Moderate
3	Strong
VF	Very fine
F	Fine
M	Medium
C	Coarse
VC	Very coarse
GR	Granular
CR	Crumb
PL	Platy
PR	Prismatic
ABK	Angular blocky
SBK	Subangular blocky
M	Massive

CONSISTENCE

Dry:

LO	Loose
SO	Soft
SH	Slightly hard
H	Hard
VH	Very hard
EH	Extremely hard

Moist:

LO	Loose
VFR	Very friable
FR	Friable
FI	Firm
VFI	Very firm
EFI	Extremely firm

401

SOIL MAP UNIT INTERPRETATION - ORDER - 3

USDA-SCS

SOIL MAP UNIT SYMBOL AND NAME: 401 Moonshine - Fishlake - Pedoli Taxajunct Association

PRESENT MAJOR LAND USES: Range

POTENTIAL FORESEEABLE USES: see below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.0D PAGE 1					
	2.10	2.20	2.30	2.40	2.5D	2.6D
CAPABILITY SUBCLASS- IRR.						
NIRR.	4S	7S	IIHc	3c	7s	same as 2.30
SUITABILITY FOR RANGE SEEDING	VERY POOR - ROOT ZONE	VERY POOR - ROOT ZONE	POOR - PRECIPITATION	POOR - PRECIPITATION	VERY POOR - ROOT ZONE. AWC	
Shallow Excavation	SEVERE - CEMENTED PAN	SEVERE - CEMENTED PAN	SEVERE - CUTBANKS CAVE	SLIGHT	SEVERE - DEPTH TO ROCK	
Local Roads + Streets	SEVERE - CEMENTED PAN	SEVERE - CEMENTED PAN, LOW STRENGTH	SEVERE - LOW STRENGTH	MODERATE - FLOODS LOW STRENGTH, FROST ACTION	SEVERE - DEPTH TO ROCK LOW STRENGTH	
Roadfill	POOR - AREA RECLAIM, LOW STRENGTH	POOR - THIN LAYER, LOW STRENGTH	FAIR - LOW STRENGTH	FAIR - LOW STRENGTH	POOR - AREA RECLAIM LOW STRENGTH, THIN LAYER	
Sand	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES	IMPROBABLE - EXCESS FINES, THIN LAYER	
Gravel	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES	IMPROBABLE - EXCESS FINES, THIN LAYER	
Pond Reservoir Area	SEVERE - CEMENTED PAN	SEVERE - CEMENTED PAN	SEVERE - SEEPAGE; 8-15%: SEVERE - SLOPE	3-4%: MODERATE - SLOPE	SEVERE - DEPTH TO ROCK 8-15%: SEVERE - DEPTH TO ROCK, SLOPE	
Embankments, Dikes, Levees	SEVERE - THIN LAYER	SEVERE - THIN LAYER, PIPING	SEVERE - THIN LAYER PIPING	SEVERE - PIPING	SEVERE - THIN LAYER	

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.0D PAGE 1	WOODLAND SUITABILITY			SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE				
	DRD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX	Grain + Seed Crop	Dem. Grass + Leg.	Herb. Plts	Shrub Plts	Shrubs
2.10 Moonshine		Utah Juniper, Pinyon Pine		V. Poor	V. Poor	Fair	Poor	Fair
2.20 Fishlake, moist		Utah Juniper				Fair	Poor	Fair
2.30 Uinl		None		Poor	Fair	Fair		Fair
2.40 Applebush		NONE		Fair	Fair	Fair		Fair
2.50 Parachbowl, moist		Utah Juniper				Poor	V. Poor	Poor
2.60 Pedol, high elevation		Pinyon Pine, Utah Juniper				Fair	Fair	Fair

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS					
		2.1D FROM PAGE 1	2.2D FROM PAGE 1	2.3D FROM PAGE 1	2.4D FROM PAGE 1	2.5D FROM PAGE 1	2.6D FROM PAGE 1
Thurber needlegrass	STTH2	12	5		4		15
Bluebunch wheatgrass	AGSP	2	10	2	3	2	5
Indian ricegrass	ORHY	10	2	12	12	12	
Bottlebrush squirreltail	SIHY	2			3		
Sandberg bluegrass	POSE		3		2		
needle and thread	STCO4		5	10	7	10	
Rive bluegrass	POSC			6	3	6	6
galleta	HIJA				2		
bare ground	ELCI2						2
mtn big sagebrush	ARTRV						30
snowberry	SYMPH						5
other grasses	PPG6	4	5	10		10	2
forbs	PPFF	10	10	15	15	15	10
other unk. forbs	AAFF		5				
Utah juniper	JUOS		5				
Wyoming big sagebrush	ARTRW				25		10
Spiny hopsage	GRSP				4		
Nevada ephedra	EPNE				2		
Spineless horsebrush	TECA2				2		
bud sagebrush	ARSPS			7		7	
winterfat	EULA5			3	2	3	
fourwing saltbush	ATCA2			3	8		
4-wing/spiny bitterbrush	PUTR2		5				
littleleaf mahogany	CELE		5				
cliffrose	COMES		5				
black sagebrush	ARARN	40	20	25		25	
ephedra	EPHED	5	5				
Douglas rabbitbrush	CHVIS	5		2	2	2	5
other shrubs	SSSS	10	10	6		6	10
RANGE SITE NAME OR NUMBER		P/J black sage	Juniper savannah 11-16"	Shallow loamy 8-12"	Loamy 8-10"	Juniper savannah 11-16"	P/J big sage
POTENTIAL PRODUCTION LBS. AC. DRY WT. FAVORABLE YEARS		725	500	650	800	500	900
NORMAL YEARS		500	300	350		300	600
UNFAVORABLE YEARS		250	250	175	400	250	300

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2:

4/12

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY

USDA-BOS

SOIL SURVEY AREA: Sevenmile wash Nye Co MLRA: 28 DATE: BY:

SOIL MAP UNIT SYMBOL AND NAME: Shag/Lasty - Roca - Rock outcrop association 412 Rev. 1130/80 PLS DMS

1.00 SETTING NAP-14" PFS 50-55 days AAAT 48°F Elev. - 6500' to 8000'; most ppt falls in the Winter + Spring
Smooth + convex slopes on mtns. + hills

2.00 MAP UNIT COMPOSITION

MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10 Shag - very extremely stony loam, 30 to 50 percent slopes Fine-loamy, mixed, frigid Aridic Argixerolls	45	30-50% slopes; Smooth mtn. + hillslopes at higher elevations; northerly aspect; colluvium and alluvium	PJ Big Sagebrush
2.20 Roca extremely stony loam, 30 to 50 percent slopes Loamy, mixed, frigid Argic Lithic Cryoborolls	25	30-50% slopes; north facing slopes on smooth mountains + hills; colluvium and alluvium	PJ Big sagebrush
2.30 Rock outcrop, Andesite	15		none

CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40 Sevenmile silt loam, 0 to 4 percent slopes Coarse-loamy, mixed, frigid Torrifluventic Haploxerolls	2	1	5	0-4%; drainageways	deep, coarse-loamy control section
2.50 Lithic Argixerolls, loam, skeletal, mixed, frigid, 15 to 50 percent slopes	5	.5	20	15-50%; higher elevations on mountains and hills	Not cryic, skeletal, shallow to bedrock
2.60 Aridic Argixerolls, fine, montmorillonitic, frigid, 3 to 30 percent slopes	8	.5	20	8-30%; higher elevations on mountains and hills	8 to 30 percent slopes

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Shag very extremely stony loam, 30 to 50 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-3	STX-L	30	0-10	ML, CL, ML	A-4	1, M, PL	SO	VFR	7.4-7.8		
3-9	GR-L	10	15	CL	A-6	2, M, SBK	H	FI	7.4-7.8		
9-22	GRV-L	15	40	GC	A-6, A-7-6	M	H	FI	7.4-7.8		
22+											

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTH
0-3	0.6-2.0	.16-.18		LOW	.37	3	C	NONE	-	-	>5.0	-	-
3-9	0.2-0.6	.15-.17		MODERATE									
9-22	0.2-0.6	.10-.12		MODERATE									
22+													

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK THICKNESS	CEMENTED PAN OR BEDROCK HARDNESS
5	HIGH	MODERATE	HIGH	LOW	MODERATE	20-40	-	HARD

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10:

3.20 MAJOR COMPONENT NAME: Roca extremely stony loam, 30 to 50 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-6	GR-L	0	25-30	SM	A-4	2, F, GR	SO	VFR	6.6-7.8		
6-9	GR-L	0	45	GM-GC, GM	A-2-4	2, F, SBK	SH	FR	6.6-7.3		
9-12	SL	0	0	SM, SM-SC	A-4, A-2-4	2, F, SBK	SO	VFR	6.6-7.3		
12+	R										

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-6	0.6-2.0	.13-.15		LOW	.32	1	D						
6-9	0.6-2.0	.11-.13		LOW									
9-12	2.0-6.0	.11-.13											
12+	R												

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK THICKNESS	CEMENTED PAN OR BEDROCK HARDNESS
5	HIGH	MODERATE	LOW	LOW	MODERATE	10-20	-	HARD

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20:

3.30 MAJOR COMPONENT NAME: Rock Outcrop, andesite

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN OR BEDROCK THICKNESS	CEMENTED PAN OR BEDROCK HARDNESS

3.31 NONCONTRASTING INCLUDED SOILS WITH 3.30: Footnotes

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.)
W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE

G	Gravel
SG	Sandy gravel
S	Sand
COS	Coarse sand
FS	Fine sand
VFS	Very fine sand
LCOS	Loamy coarse sand
LS	Loamy sand
LFS	Loamy fine sand
LVFS	Loamy very fine sand
COSL	Coarse sandy loam
LS	Sandy loam
FSL	Fine Sandy Loam
VFSL	Very fine sandy loam
SIC	Silty Clay
C	Clay
SICL	Silty clay loam
CL	Clay loam
L	Loam
SIL	Silt loam
SCL	Sandy clay loam
UWB	Unweathered bedrock
WB	Weathered bedrock

HORIZON TEXTURE MODIFIERS

CB	Cobbly
CBA	Angular Cobbly
CBV	Very cobbly
FL	Flaggy
GR	Gravelly
GRC	Coarse gravelly
GRF	Fine gravelly
GRV	Very gravelly
ST	Stratified
ST	Stony
STV	Very stony
STE	Extremely stony

STRUCTURE

SG	Single grain
1	Weak
2	Moderate
3	Strong
VF	Very fine
F	Fine
M	Medium
C	Coarse
VC	Very coarse
GR	Granular
CB	Crumb
PL	Platy
PR	Prismatic
ABK	Angular blocky
SBK	Subangular blocky
M	Massive

CONSISTENCE

Dry:

LO	Loose
SO	Soft
SH	Slightly hard
H	Hard
VH	Very hard
EH	Extremely hard

Moist:

LO	Loose
VFR	Very friable
FR	Friable
FI	Firm
VFI	Very firm
EFI	Extremely firm

SOIL MAP UNIT INTERPRETATION - ORDER - 3

USDA-SCS

SOIL MAP UNIT SYMBOL AND NAME: Stagnasty-Poca - Rock Outcrop Association 412

PRESENT MAJOR LAND USES: Range, woodland, Wildlife Habitat

POTENTIAL FORESEEABLE USES: Same as present plus recreation

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR.				4e		
NIRR.	7e	7s	8	(1)	7s	7s
SUITABILITY FOR RANGE SEEDING	30-50%: VERY POOR-SLOPE	VERY POOR - ROOT ZONE, AWC		FAIR (2) - PRECIPITATION	VERY POOR - ROOT ZONE, AWC	VERY POOR - ROOT ZONE, AWC
		30-50%: V. POOR-R.Z, AWC, SL				30-50%; V. POOR SLOPE, RZ, AWC
Shallow Excavations	SEVERE - DEPTH TO ROCK	SEVERE - DEPTH TO ROCK		MODERATE - FLOODS	SEVERE - DEPTH TO ROCK	SEVERE - DEPTH TO ROCK
	30-50%: SEV. - SLOPE, D.T.R.	30-50%: SEVERE - SLOPE, D.T.R.			15-30%: SEV. - SLOPE, D.T.R.	30-50%: SEV. - SLOPE, D.T.R.
Local Roads & Streets	SEVERE - LOW STRENGTH	SEVERE - DEPTH TO ROCK		SEVERE - FLOODS	SEVERE - DEPTH TO ROCK	SEVERE - DEPTH TO ROCK
	30-50%: SEV. - SLOPE, L.S.	30-50%: SEV - SLOPE, D.T.R			15-30%: SEV: SLOPE, D.T.R	30-50%: SEV. - SLOPE, D.T.R.
Road Fill	POOR - AREA REC., LOW S.	POOR - AREA RECLAIM, THIN LAYER		FAIR - LOW STRENGTH	POOR - AREA REC., THIN LAYER	POOR - AREA REC., THIN LAYER
	30-50%: POOR-SLOPE, A.R., L.S.	30-50%: SEV. SLOPE A.R., T.L.			25-30%: POOR-SLOPE, AR, T.L.	25-50%: POOR-SLOPE, AR, T.L.
Sand	IMPROBABLE - EXCESS FINES; THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER		IMPROBABLE - EXCESS FINES	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - THIN LAYER
Gravel	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER		IMPROBABLE - EXCESS FINES	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - THIN LAYER
Pond Reservoir Area	30-50%: SEVERE 30-50% SLOPE	SEVERE - DEPTH TO ROCK		SEVERE - SEEPAGE	SEVERE - DEPTH TO ROCK	SEVERE - DEPTH TO ROCK, SEEP
		30-50%: SEV. - SLOPE D.T.R			15-30%: SEV. - SLOPE, D.T.R.	30-50%: SEV. - SLOPE, D.T.R, SEE
Embankments, Dikes, Levees	SEVERE - THIN LAYER	SEVERE - PIPING, THIN LAYER		SEVERE - PIPING	SEVERE - THIN LAYER	SEVERE - THIN LAYER, SEEPAGE

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY			SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE			
	ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX	WILD HERB. PLANTS	CONIFEROUS PLANTS	SHRUBS	
2.10 Shagnasty		Pinyon - Juniper		FAIR	FAIR	FAIR	
2.20 Poca		Pinyon - Juniper		POOR	VERY POOR	POOR	
2.30 Rock outcrop		None		—		—	
2.40 Sevenmile, moist.		None		GOOD		FAIR	
2.50 Lithic Argixerolls, loamy-skeletal, mixed, frigid		NONE		FAIR		FAIR	
2.60 Xeridic Argixerolls, fine-montmorillonitic, frigid		NONE		FAIR		FAIR	

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS					
		2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PADE 1	2.60 FROM PADE 1
Thurber needlegrass	STTH2	15	15				5
Bluebunch wheatgrass	AGSP	5	5			10	10
Pine bluegrass	POSC	6	6				
Basin wildrye	ELCI7	2	2		40		5
Nevada bluegrass	PONE				5		
Western wheatgrass	AGSM				3		
Slender wheatgrass	AGTR				2		
Idaho fescue	FEID					15	20
Indian ricegrass	ORHY					5	
Sandberg bluegrass	POSE					5	
Letterman needlegrass	STLE4					2	5
Bottlebrush squirreltail	SIHY					3	
Other grasses	PPGG	2	2		20	10	10
Forbs	PPFF	10	10		15	5	10
Other perennial forbs	AAFF					5	5
Goldenweed	HAPL2					5	
Low sagebrush	ARAR8					20	20
Black sagebrush	ARNO					5	
Low rabbitbrush	CHVI8					3	5
Horsebrush	TETRA					2	
Basin big sagebrush	ARTRT				8		
Mt. big sagebrush	ARTRV	30	30				
Wyoming big sagebrush	ARTRW	10	10				
Douglas rabbitbrush		5	5				
Snowberry	SYMPH	5	5				
Other shrubs	SSSS	10	10		7	5	5
RANGE SITE NAME OR NUMBER		P/S big sage	P/S big sage		Loamy bottom 12-16"	Mtn ridge 12-16"	Clayey 12-16"
POTENTIAL PRODUCTION LBS. AC. DRY WT. FAVORABLE YEARS		900	900		2600	400	900
NORMAL YEARS		600	600		1700	300	600
UNFAVORABLE YEARS		300	300		800	200	400

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2:

19714 4/20

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY

USDA-BOS

SOIL SURVEY AREA: Nye Co. - Sevenmile Wash Area MLRA: 2.8 DATE: Rev. 11/30/90 BY: PLS DMS

SOIL MAP UNIT SYMBOL AND NAME: Secret Creek - Buster - Punchbowl association - 420

1.00 SETTING - old dissected terrace fan
- AAP - 11" to 14" AAAT - 45° to 47°F FFS - 80 days
- Elev 6000' to 7400' ; most ppt falls in the winter + spring

2.00 MAP UNIT COMPOSITION

	MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10	Secret Creek loam, 4 to 15 percent slopes - Coarse - loamy, mixed, frigid Aridic Haploxerolls	50	younger areas on top of the terrace fans, alluvium, 4 to 15 percent slopes	[illegible]
2.20	Buster sandy loam, 4 to 15 percent slopes - Loamy, mixed, frigid Lamiventlic Haplargids	25	4-15% slopes; old Terrace remnants ; alluvium	big sagebrush
2.30	Punchbowl sandy loam, 8 to 30 percent slopes - Loamy, mixed, frigid Lithic Xeroll.c Haplargids	15	8-30% slopes ; sidestopes of terrace fans; residuum	black sagebrush

	CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40	Rock outcrop, andesite	2				no soil
2.50	Unsil loam, 2 to 15 percent slopes - Loamy, mixed, frigid, shallow Xeroll.c Durorthids	4			2-15% Terrace remnants	shallow to duripan
2.60	Fortlake sandy loam, 2 to 15 percent slopes - loamy, mixed, frigid, shallow Xeroll.c Durargids	4			2-15% Terrace remnants	shallow to duripan

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Secret Creek loam, 4 to 15 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-34	L	0	0-10	CL-ML	A-4	1, VF, GR	H	FR	7.9-8.4		
34-60	VFSL	0	0-10	ML	A-4	M	SH	VFR	7.9-8.4		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. ORP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTH
0-34	6.6-2.0	.16-.18		LOW	.24	5	B	NONE	-	-	>6.0	-	-
34-60	0.6-2.0	.15-.17		LOW									

	EROSION HAZARD WIND	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
	EROD. GRP. 5	HIGH	LOW	HIGH	LOW	MODERATE	>60	-	-

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10:

3.20 MAJOR COMPONENT NAME: Buster sandy loam, 4 to 15 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-5	SL	0	0	SM-SC, SM	A-4, A-2-4	1, M, PL	SO	VFR	6.6-7.3		
5-14	L	0	0	CL-ML, ML	A-4	2, M, SBK	SH	FR	7.4-7.8		
14-20	GR-L	10	40	GM-GC	A-4	1, M, SBR	SH	FR	7.4-7.8		
20-60	GR-SL	0	30	SM-SC, SM	A-2-4	M	SO	VFR	7.9-8.4		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. ORP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-5	2.0-6.0	.11-.13		LOW	.20	5	B	RARE	V. BRIEF	MAR-MAY	>5.0	-	-
5-14	0.6-2.0	.16-.18		LOW									
14-20	0.6-2.0	.11-.13		MODERATE									
20-60	2.0-6.0	.02-.09		LOW									

	WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
	3	LOW-HIGH	HIGH	LOW	LOW	MOD	>60	-	-

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20:

3.30 MAJOR COMPONENT NAME: Punchbowl

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-3	SL	0	0	SM-SC, SM	A-2-4, A-4	1, F GR	SO	VFR	7.4-7.8		
3-7	SCL	0	0	SM-SC, SM	A-4, A-6	2, M, SBK	H	FI	7.9-8.4		
7-11	GR-C	0	30	CL, ML	A-7-6, A-6	M	VH	VFI	7.9-8.4		
11+	R	0	0								

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-3	2.0-6.0	.11-.13		LOW	.28	1		NONE	-	-	>5.0	-	-
3-7	0.2-0.6	.14-.16		MODERATE									
7-11	.06-0.2	.11-.13		MODERATE									
11+													

	WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
	5	MOD-HIGH	MODERATE	MODERATE	LOW	MOD	10-20	-	HARD

3.31 NONCONTRASTING INCLUDED SOILS WITH 3.30:

Footnotes

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.)
W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE
- G Gravel
- SG Sandy gravel
- S Sand
- COS Coarse sand
- FS Fine sand
- VFS Very fine sand
- LCOS Loamy coarse sand
- LS Loamy sand
- LFS Loamy fine sand
- LVFS Loamy very fine sand
- COSL Coarse sandy loam
- SL Sandy loam
- FSL Fine Sandy Loam
- VFSL Very fine sandy loam
- SIL Silty Clay
- C Clay
- SICL Silty clay loam
- CL Clay loam
- L Loam
- SIL Silt loam
- SCL Sandy clay loam
- UWB Unweathered bedrock
- WB Weathered bedrock

HORIZON TEXTURE MODIFIERS
- CB Cobbly
- CBA Angular Cobbly
- CBV Very cobbly
- FL Flaggy
- GR Gravelly
- GRC Coarse gravelly
- GRF Fine gravelly
- GRV Very gravelly
- SR Strerified
- ST Stony
- STV Very stony
- STX Extremely stony

STRUCTURE
- SG Single grain
- 1 Weak
- 2 Moderate
- 3 Strong
- VF Very fine
- F Fine
- M Medium
- C Coarse
- VC Very coarse
- GR Granular
- CR Crumb
- PL Platy
- PR Prismatic
- ANK Angular Blocky
- SBK Subangular blocky
- M Massive

CONSISTENCE
- Dry:
  - LO Loose
  - SO Soft
  - SH Slightly hard
  - H Hard
  - VH Very hard
  - EH Extremely hard
- Moist:
  - LO Loose
  - VFR Very friable
  - FR Friable
  - FI Firm
  - VFI Very firm
  - EFI Extremely firm

PAGE 1

USDA-SCS

SOIL MAP UNIT INTERPRETATION - ORDER - 3

SOIL MAP UNIT SYMBOL AND NAME: 420 - Secret Creek - Buster - Punchbowl Association
PRESENT MAJOR LAND USES: range
POTENTIAL FORESEEABLE USES: see below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR.		4e		8	7s	7s
NIRR.	7e		7s			
SUITABILITY FOR RANGE SEEDING	30-50%: V. POOR-PRECIPITATION	POOR- PRECIPITATION	VERY POOR - ROOT ZONE, AWC		VERY POOR - ROOT ZONE	VERY POOR - ROOT ZONE
Shallow Excavations	30-50%: SEV - SLOPE	SLIGHT	SEVERE - DEPTH TO ROCK		SEVERE - CEMENTED PAN	SEVERE - CEMENTED PAN
Local Roads + Streets	30-50%: SEVERE - SLOPE	MODERATE - FROST ACTION	15-30%: SEV. - SLOPE, D.T.R		SEVERE - CEMENTED PAN	SEVERE - CEMENTED PAN, LOW STRENGTH
Roadfill	30-50%: SEVERE - SLOPE	GOOD	SEVERE - DEPTH TO ROCK, LOW S.		POOR - THIN LAYER	POOR - THIN LAYER, LOW STRENGTH
Sand	IMPROBABLE - EXCESS FINES	IMPROBABLE - EXCESS FINES	15-30%: SEV - SLOPE, D.T.R, L.S.		IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER
Gravel	IMPROBABLE - EXCESS FINES	IMPROBABLE - EXCESS FINES	POOR - AREA RECLAIM, LOW STRENGTH, THIN LAYER		IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES, THIN LAYER
Pond Reservoir Areas	30-50%: SEVERE - SLOPE	8-15%: SEVERE - SLOPE	IMPROBABLE - EXCESS FINES, THIN LAYER		SEVERE - CEMENTED PAN	SEVERE - CEMENTED PAN
Embankments, Dikes, Levees	SEVERE - PIPING	MODERATE - SEEPAGE	SEVERE - DEPTH TO ROCK		8-15%: SEVERE - CEMENTED PAN, SLOPE	
			8-30%: SEV - D.T.R, SLOPE		SEVERE - THIN LAYER, PIPING	SEVERE - THIN LAYER, PIPING
			SEVERE - THIN LAYER			

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX	SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE GRAIN AND SEED CROPS	DOMESTIC GRASSES AND LEGUMES	WILD HERB PLANTS		SHRUBS
2.10 Secret Creek		NONE				GOOD		GOOD
2.20 Buster, moist		NONE		POOR	POOR	GOOD		GOOD
2.30 Punchbowl		NONE				POOR		POOR
2.40 Rock Outcrop		NONE				-		-
2.50 Unl		NONE				FAIR		FAIR
2.60 Fishlake		NONE				FAIR		FAIR

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTIND INCLUSIONS 2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
basin wildrye	ELCI2	-	-	1-5		1-5	1-5
bluebunch wheatgrass	AGSP	5-12	5-12	5-10		5-10	5-10
blue grama	BOGR2	1-5	1-5	1-5		1-5	1-5
bottle brush squirreltail	SIHY	1-5	1-5	1-5		1-5	1-5
gallleta	HIJA	1-5	1-5	1-5		1-5	1-5
Indian rice grass	ORHY	5-10	5-10	5-10		5-10	5-10
needle and thread	STCO4	5-10	5-10	5-10		5-10	5-10
sand dropseed	SPCR	1-5	1-5	-		-	-
sandberg bluegrass	POSE	-	-	1-5		1-5	1-5
thickspike wheatgrass	AGDA	1-5	1-5	-		-	-
~~western wheatgrass~~	~~AGSM~~	~~-~~	~~-~~	-		-	-
buckwheat	ERIOG	1-2	1-2	1-2		1-2	1-2
globemallow	SPHAE	1-2	1-2	1-2		1-2	1-2
penstemon	PENST	1-2	1-2	1-2		1-2	1-2
princes plume	STANL	1-2	1-2	1-2		1-2	1-2
black sagebrush	ARNO	1-2	1-2	20-30		20-30	20-30
bud sagebrush	ARSPS	1-2	1-2	5-10		5-10	5-10
cacti		1-2	1-2	1-2		1-2	1-2
ephedra	EPHED	2-5	2-5	1-2		1-2	1-2
Fourwing saltbush	ATCA2	5-10	5-10	2-5		2-5	2-5
little leaf horse brush	TEGL	1-2	1-2	1-2		1-2	1-2
Wyoming big sagebrush	ARTRW	15-25	15-25	1-2		1-2	1-2
Small rabbitbrush	CHVI5	1-2	1-2	2-5		2-5	2-5
Spiny hopsage	GRSP	2-5	2-5	1-2		1-2	1-2
shadscale	ATCO	-	-	1-2		1-2	1-2
Yucca	YUCCA	-	-	1-2		-	-
Winterfat	KRLA5	1-2	1-2	-		1-2	1-2
Mountain big sagebrush	ARTRV	-	-	1-2		-	-
Milkvetch	ASTRA	-	-	-		1-2	
PHLOX	PHLOX	1-2	1-2	1-2			
RANGE SITE NAME OR NUMBER		Loamy 10-12"	Loamy 10-12"	Shallow Hill D-13"		Shallow loams 8-12"	Shallow loams 8-12"
POTENTIAL PRODUCTION LBS. AC. DRY WT. FAVORABLE YEARS		900	900	420		650	650
NORMAL YEARS		500	500	350		350	350
UNFAVORABLE YEARS		250	250	175		175	175

9.00 ABBREVIATIONS USED PAGE 2:

FOOTNOTES PAGE 2:

19714

SOIL MAP UNIT DESCRIPTION - ORDER 3 SOIL SURVEY

471

USOA-BOS

SOIL SURVEY AREA: Sevenmile Wash - Nye Co. MLRA: 28 DATE: BY:

SOIL MAP UNIT SYMBOL AND NAME: Labs Ind - Wino Association - 471 REU 11/30/90 PLS DMS

1.00 SETTING Steep mountain sideslopes, top and ridges; 0-50% slopes; most ppt. falls in the winter + spring

2.00 MAP UNIT COMPOSITION

MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10 Labs ind: very stony loam, 15 to 50 percent slopes - loamy-skeletal, mixed Lithic Cryoborolls	50	15-50% slopes, mountain ridges shoulders, and upper slopes; smooth to convex slopes; gravelly residuum	Mt Mahogany, Mt Big Sagebrush, basin wildrye, Snowberry, Oregon grape, POSE
2.20 Wino gravelly loam, 15 to 30 percent slopes Fine-loamy, mixed Argic Pachic Cryoborolls	30	15-30% slopes, mountain sideslopes and footslopes; smooth to concave slopes; northerly aspect; alluvium and colluvium	Mt Big Sagebrush, Mt Mahogany, Idaho Fescue, Mt. Brome, basin wildrye
2.30			

CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40 Pollico: 1 to 10 percent slopes, north aspect - loamy-skeletal, mixed Argic Pachic Cryoborolls	10	<1	20	8-30%, snow pockets and toeslopes	skeletal - argills B$
2.50 Argic Lithic Cryoborolls, clayey-anil clayey-skeletal, montmorillonitic & to 30 percent slopes	7	<1	20	8-30%, mountain ridgetops and shoulders	shallow soils with loamy part, size class
2.60 Rock outcrop, andesite	3	<1	10		No Soil

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Labschoft very stony loam, 15 to 50 percent slope

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-5	STV-L	10	40	GM, GM-GC	A-4	1, VF, GR	SO	FR	6.6-7.3		
5-11	GRV-SIL	15	60	GM, GM-GC	A-2-4	2, M+F, ABK	SH	FI	6.6-7.3		
11+	UWB										

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTH
0-5	0.6-0.2	.13-.15		LOW	.28	1	D	NONE	-	-	>6.0	-	-
5-11	0.6-0.2	.09-.11		LOW									
11+													

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
5	HIGH	MODERATE	LOW	LOW	MODERATE	10-20	-	HARD

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10: Soils like this but shallow to a paralithic contact;

3.20 MAJOR COMPONENT NAME: Wino gravelly loam, 15 to 30 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-8	GR-L	0	30	CL-ML	A-4	2, VF GR	SO	FR	6.6-7.?		
8-30	GR-CL	10	30-40	GC, SC, GC-SC	A-6	2, M+F, ABK	H	FI	6.6-7.8		
30-32	WB										
32+	UWB										

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-8	0.6-0.2	.14-.16		LOW	.28	2	C	NONE	-	-	>6.0	-	-
8-30	0.2-0.6	.13-.15		MODERATE									
30-32													
32+													

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS
5	MOD.-HIGH	MODERATE	MODERATE	LOW	MODERATE	20-40	-	HARD

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20: Typic Pachic Cryoborolls; Argic Cryoborolls

3.30 MAJOR COMPONENT NAME:

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS

WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	BEDROCK HARDNESS

3.31 NONCONTRASTING INCLUDED SOILS WITH 3.30: Footnotes

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.- AVAILABLE WATER CAPACITY (IRR.)

W.S.C.- WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE

G	Gravel
SG	Sandy gravel
S	Sand
COS	Coarse sand
FS	Fine sand
VFS	Very fine sand
LCOS	Loamy coarse sand
LS	Loamy sand
LFS	Loamy fine sand
LVFS	Loamy very fine sand
COSL	Coarse sandy loam
LS	Sandy loam
FSL	Fine Sandy Loam
VFSL	Very fine sandy loam
SC	Silty Clay
C	Clay
SICL	Silty clay loam
CL	Clay loam
L	Loam
SIL	Silt loam
SCL	Sandy clay loam
UWB	Unweathered bedrock
WB	Weathered bedrock

HORIZON TEXTURE MODIFIERS

CB	Cobbly
CBA	Angular Cobbly
CBV	Very cobbly
FL	Flaggy
GR	Gravelly
GRC	Coarse gravelly
GRF	Fine gravelly
GRV	Very gravelly
SR	Stratified
ST	Stony
STV	Very stony
STX	Extremely stony

STRUCTURE

SG	Single grain
1	Weak
2	Moderate
3	Strong
VF	Very Fine
F	Fine
M	Medium
C	Coarse
VC	Very coarse
GR	Granular
CR	Crumb
PL	Platy
PR	Prismatic
ABK	Angular blocky
SBK	Subangular blocky
M	Massive

CONSISTENCE

Dry:

LO	Loose
SO	Soft
SH	Slightly hard
H	Hard
VH	Very hard
EH	Extremely hard

Moist:

LO	Loose
VFR	Very friable
FR	Friable
FI	Firm
VFI	Very firm
EFI	Extremely firm

SOIL MAP UNIT INTERPRETATION - ORDER - 3

USDA-SCS

SOIL MAP UNIT SYMBOL AND NAME: 471- Labschoff - Winu Taxajunct Association

PRESENT MAJOR LAND USES: Range

POTENTIAL FORESEEABLE USES: see below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR.						
NIRR.	7s	6s		7s	7s	7s
SUITABILITY FOR RANGE SEEDING	VERY POOR - ROOT ZONE, ANC	FAIR - ROOT ZONE,		30 - 50%: VERY	VERY POOR-ROOT ZONE, ANC	
	30-70%: V. POOR - SLOPE, R.Z., ANC	SLOPE		POOR - SLOPE	30-50%: V. POOR-SLOPE, R.Z., ANC	
Shallow Excavations	SEVERE - DEPTH TO ROCK	SEVERE-DEPTH TO ROCK		MODERATE - LARGE STONES, SLOPE	SEVERE - DEPTH TO ROCK	
	15-70%: SEV. - SLOPE, D.T.R.	15-30%: SEV. - SLOPE, D.T.R.		15-50%: SEVERE - SLOPE	30-50%: SEVERE SLOPE D.T.R	
Local Roads & Streets	SEVERE - DEPTH TO ROCK	SEVERE - LOW STRENGTH		SEVERE - LOW STRENGTH	SEVERE - DEPTH TO ROCK	
	15-70%: SEV. - SLOPE, D.T.R.	15-30%: SEV. - SLOPE, LOW S.		15-50%: SEVERE - SLOPE, LOW ST.	30-50%: SEV. SLOPE D.T.R	
Roadfill	POOR - AREA RECLAIM, THIN L.	POOR - AREA REC, LOW S, THIN L.		POOR - LOW STRENGTH	POOR - AREA RECLAIM, THIN	
	25-70%: POOR - SLOPE, A.R., T.L.	25-30%: POOR - SLOPE, A.R., L.S.		25-50%: POOR - SLOPE, LOW ST.	LAYER; 30-50%: SEV. SLOPE A.R. T.L.	
Sand	IMPROBABLE - EXCESS	IMPROBABLE - EXCESS		IMPROBABLE - EXCESS	SEVERE - EXCESS FINES	
	FINES, THIN LAYER	FINES, THIN LAYER		FINES	THIN LAYER	
Gravel	IMPROBABLE - EXCESS	IMPROBABLE - EXCESS		IMPROBABLE - EXCESS FINES	SEVERE - EXCESS FINES	
	FINES, THIN LAYER	FINES, THIN LAYER			THIN LAYER	
Pond Reservoir Areas	SEVERE - DEPTH TO ROCK	8-30%: SEVERE -		15-50%: SEVERE - SLOPE	SEVERE - DEPTH TO ROCK	
	15-70%: SEV. - SLOPE, D.T.R.	SLOPE		[redacted]	30-50% SEV. - DEPTH TO ROCK, SL	
Embankments, Dikes, Levees	SEVERE - THIN LAYER	SEVERE - THIN LAYER		SEVERE - LARGE STONES	SEVERE THIN LAYER	

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY			SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE					
	ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX			Herb Pts		Shrubs	
2.10 Labschoff		NONE				Poor		Poor	
2.20 Winu Taxajunct		NONE				Fair		Good	
2.30									
2.40 Mulligan, warm aspect		NONE				Good		Good	
2.50 Clayey and clayey-skeletal, mixed Argic Lithic Cryoborolls		NONE				Poor		Poor	
2.60 Rock Outcrop, andesite		NONE				Var		Var	

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS					
		2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
Idaho fescue	FEID	9	20		10	20	
bluebunch wheatgrass	AGSP	5	5		5	10	
western needlegrass	STOC2	5					
Letterman needlegrass	STLE4	4	5		2	5	
Thurber needlegrass	STTH2	4				5	
pine bluegrass	POSC	4					
sandgrass	KOCR	2					
mountain brome grass	BRMA4		10		6		
Columbia needlegrass	STC03		5		2		
basin wildrye	ELCI2		5		2	5	
sedge	CAREX				1		
Sandberg's bluegrass	AGTR				2		
other grasses	PPGG	5	5		2	10	
forbs	PPFF	12	10		20	10	
other annual forbs	AAFF		5			5	
Nevada bluegrass	PONE3				3		
low sagebrush	ARAR8					20	
Cheatgrass	PRJU				20		
barberry	BERE				2		
Currant	RIBES				2		
Service berry	AMAL2		3		3		
low rabbit brush	CHVI8		2			5	
Mtn mahogany	CELE3	30					
Mtn big sagebrush	ARTRV	7	15		5		
Snowberry	SYMPH	7	5		10		
Ignacio rabbit brush	CHVI1	2			3		
Other shrubs	SSSS	4	5			5	
RANGE SITE NAME OR NUMBER		Mahogany Savannah Loamy 16-22"			Upland Brush 12"+P	Clayey 12-18"	
POTENTIAL PRODUCTION LBS. AC. DRY WT. FAVORABLE YEARS		1400	1600		1600	900	
NORMAL YEARS			900			600	
UNFAVORABLE YEARS		600	400		800	400	

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2:

501

USDA-BOR

SOIL MAP UNIT DESCRIPTION - ORDER 1 SOIL SURVEY

SOIL SURVEY AREA: Sevenmile Wash Area - Nye Co. | LRA: 28 | DATE: | BY: Rev. 1/30/80 PLS, DMS

SOIL MAP UNIT SYMBOL AND NAME: Hymas - Ansping association - 501

1.00 SETTING
- steeply sloping mountains and hills with valley fills
- AAP - 11" to 16", AAAT - 41°-47°F, FFS - 80 ; precipitation comes in the spring and winter
- Elev 6500' ± 200'

2.00 MAP UNIT COMPOSITION — MAJOR SOILS AND/OR LAND AREAS (INCLUDE FAMILY NAME)	% IN M.U.	PHYSIOGRAPHY, PARENT MATERIAL AND SLOPE CHARACTERISTICS	PRESENT VEGETATION TYPE
2.10 Hymas cobbly loam, 15 to 30 percent slopes - Loamy-skeletal, carbonatic frigid Lithic Haploxerolls	55	15-30%; upper sideslopes and hillcrests of the mountains; convex slopes; alluvium and colluvium	PIJ - big sagebrush understory
2.20 Ansping loam, 15 to 30 percent slopes - Loamy-skeletal, carbonatic frigid Aridic Calcixerolls	30	15-30%; slightly concave slopes; soils on footslopes and mid-sideslopes; alluvium and colluvium	PIJ - big sagebrush understory
2.30			

CONTRASTING INCLUDED SOILS AND/OR LAND AREAS	% IN M.U.	ACRES IN M.U. MIN	ACRES IN M.U. MAX	PHYSIOGRAPHY, AND SHAPE OF UNIT SLOPE CHARACTERISTICS	CONTRASTING CHARACTERISTICS
2.40 Rock Outcrop, limestone	5		5	mt. peaks and ridges and escarpments, 60-150+% slopes	Slope - no soil
2.50 Loamy-skeletal, carbonatic, frigid Cumulic Haploxerolls, 2 to 8 percent slopes	5			5-15% slopes; narrow mt. valley fills	Cumulic mollic epipedon
2.60 Loamy, carbonatic, frigid Aridic Calcic Argixerolls	5			low mountains and hills, 15-30% slopes	Shallow soils with an argillic

3.00 CHARACTERISTICS AND ESTIMATED PROPERTIES OF MAJOR SOILS AND/OR LAND AREAS

3.10 MAJOR COMPONENT NAME: Hymas cobbly loam, 15 to 30 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-3	CB-L	15	20	ML, CL-ML	A-4	2,F,GR	SO	VFR	7.9-8.4		
3-12	CBV-L	50-60	30-50	GM-GC, SM-SC	A-2-4, A-4	3,F,SBK	SH	VFR	7.9-8.4		
12+	UWB										

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-3	0.6-2.0	.13-.14		LOW	.28	1	D	NONE	-	-	>6.0	-	-
3-12	0.6-2.0	.09-.09		LOW									
12+													

EROSION HAZARD WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	CEMENTED PAN OR BEDROCK HARDNESS
4L	HIGH	MODERATE	HIGH	LOW	MODERATE	10-20	-	HARD

3.11 NONCONTRASTING INCLUDED SOILS WITH 3.10:

3.20 MAJOR COMPONENT NAME: Ansping loam, 15 to 30 percent slopes

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR
0-13		0	10	CL-ML	A-4	2,F-M,GR+SBK	SO,SH	VFR	7.9-8.4		
13-60	GR-L, GRV-L	0-20	45-65	GM, GM-GC	A-2-4, A-4	M	H,VH	FR,FI	8.5-9.0		

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS
0-13	0.6-2.0	.14-.16		LOW	.28	5	B	NONE	-	-	>60	-	-
13-60	0.6-2.0	.09-.12		LOW									

EROSION HAZARD WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	CEMENTED PAN OR BEDROCK HARDNESS
4L	HIGH	MODERATE	LOW	LOW	MODERATE	760	-	-

3.21 NONCONTRASTING INCLUDED SOILS WITH 3.20:

3.30 MAJOR COMPONENT NAME:

DEPTH (INS.)	USDA TEXTURE	>3 IN. (% BY WT)	2MM-3IN. (% BY WT)	UNIFIED	AASHTO	STRUCTURE	CONSISTENCE DRY	CONSISTENCE MOIST	REACTION (pH)	SALINITY (MMHOS/CM)	SAR

DEPTH (INS.)	PERMEABILITY (INS./HR.)	A.W.C. IN./IN.	W.S.C. (IN.)	SHRINK-SWELL POTENTIAL	EROS. FACTORS K	EROS. FACTORS T	SOIL HYD. GRP.	FLOODING FREQUENCY	FLOODING DURATION	FLOODING MONTHS	HIGH WATER TABLE DEPTH (FT.)	HIGH WATER TABLE KIND	HIGH WATER TABLE MONTHS

EROSION HAZARD WIND EROD. GRP.	EROSION HAZARD WATER	EROSION HAZARD WIND	CORROSIVITY STEEL	CORROSIVITY CONCRETE	POTENTIAL FROST ACTION	CEMENTED PAN OR BEDROCK DEPTH (INS.)	CEMENTED PAN THICKNESS	CEMENTED PAN OR BEDROCK HARDNESS

3.31 NONCONTRASTING INCLUDED SOILS WITH 3.30: Footnotes

4.00 ABBREVIATIONS USED PAGE 1: A.W.C.-AVAILABLE WATER CAPACITY (IRR.)
W.S.C.-WATER SUPPLY CAPACITY (NIRR.)

HORIZON TEXTURE
- G Gravel
- SG Sandy gravel
- S Sand
- COS Coarse sand
- FS Fine sand
- VFS Very fine sand
- LCOS Loamy coarse sand
- LS Loamy sand
- LFS Loamy fine sand
- LVFS Loamy very fine sand
- COSL Coarse sandy loam
- SL Sandy loam
- FSL Fine Sandy Loam
- VFSL Very fine sandy loam
- SIC Silty Clay
- C Clay
- SICL Silty clay loam
- CL Clay loam
- L Loam
- SIL Silt loam
- SCL Sandy clay loam
- UWB Unweathered bedrock
- WB Weathered bedrock

HORIZON TEXTURE MODIFIERS
- GB Cobbly
- CBA Angular Cobbly
- CBV Very cobbly
- FL Flaggy
- GR Gravelly
- GRC Coarse gravelly
- GRF Fine gravelly
- GRV Very gravelly
- SR Stratified
- ST Stony
- STV Very stony
- STE Extremely stony

STRUCTURE
- SG Single grain
- 1 Weak
- 2 Moderate
- 3 Strong
- VF Very fine
- F Fine
- M Medium
- C Coarse
- VC Very coarse
- GR Granular
- CR Crumb
- PL Platy
- PR Prismatic
- ABK Angular blocky
- SBK Subangular blocky
- M Massive

CONSISTENCE
Dry:
- LO Loose
- SO Soft
- SH Slightly hard
- H Hard
- VH Very hard
- EH Extremely hard

Moist:
- LO Loose
- VFR Very friable
- FR Friable
- FI Firm
- VFI Very firm
- EFI Extremely firm

SOIL MAP UNIT INTERPRETATION - ORDER - 3

USDA-SCS

SOIL MAP UNIT SYMBOL AND NAME: Hymas - Nasping Association - 301

PRESENT MAJOR LAND USES: Range

POTENTIAL FORESEEABLE USES: see below

6.00 INTERPRETATIONS FOR SELECTED USES - RATINGS AND OR RESTRICTIVE FEATURES

SPECIFIED USE	MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1					
	2.10	2.20	2.30	2.40	2.50	2.60
CAPABILITY SUBCLASS- IRR.						
NIRR.	6c	6s		8	6s	6s
SUITABILITY FOR RANGE SEEDING	VERY POOR-AWC/ROOT ZONE	POOR - PRECIPITATION				
Shallow Excavation	SEVERE - DEPTH TO ROCK 15-30%: SEV. - SLOPE, D.T.R.	15-30%: SEVERE - SLOPE				
Local Roads & Streets	SEVERE - DEPTH TO ROCK 15-30%: SEV. - SLOPE, D.T.R.	15-30%: SEVERE - SLOPE				
Roadfill	SEVERE - ANFN REC., THIN L. 25-30%: SEV. - SLOPE, A.R.T.L.	25-30%: SEVERE - SLOPE				
Sand	IMPROBABLE - EXCESS FINES, THIN LAYER	IMPROBABLE - EXCESS FINES				
Gravel	IMPROBABLE-EXCESS FINES, THIN LAYER	IMPROBABLE-EXCESS FINES				
Pond Reservoir Areas	SEVERE - DEPTH TO ROCK 15-30%: SEV. - SLOPE, D.T.R.	15-30%: SEVERE - SLOPE				
Embankments, Dikes, Levees	SEVERE - THIN LAYER	MODERATE PIPING				

7.00 INTERPRETATIONS FOR WOODLAND AND WILDLIFE AND OTHER UNIQUE FEATURES

MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS FROM 2.00 PAGE 1	WOODLAND SUITABILITY ORD. SYM.	POTENTIAL PRODUCTIVITY COMMON TREES	SITE INDEX	SOIL SUITABILITY FOR VEGETATIVE ELEMENTS OF WILDLIFE Grain & Herb. plants	Conif. Plants	Shrubs
2.10 Hymas		Pinyon Pine Utah Juniper		Poor	V. Poor	Poor
2.20 Nasping		Pinyon Pine Utah Juniper		Fair	Fair	Fair
2.30						
2.40 Rock Outcrop, limestone		NONE				
2.50 Loamy-skeletal, carbonatic frigid Cumulic Haploxerolls		Utah Juniper Pinyon Pine		Var.	Var.	Var.
2.60 Loamy, carbonatic frigid Aridic Calcic Argixerolls		Utah Juniper Pinyon Pine		Var.	FAIR	Var.

8.00 POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR WOODLAND UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSPN)	PERCENTAGE COMPOSITION (DRYWEIGHT) - MAJOR MAP UNIT COMPONENTS AND CONTRASTING INCLUSIONS					
		2.10 FROM PAGE 1	2.20 FROM PAGE 1	2.30 FROM PAGE 1	2.40 FROM PAGE 1	2.50 FROM PAGE 1	2.60 FROM PAGE 1
Thurber needlegrass	STTH7	15	15				15
Indian ricegrass	AGSP	5	5				5
pine bluegrass	POSC	6	6				10
basin wildrye	ELCI2	2	2			40	2
Nevada bluegrass	PONE					5	
Western wheatgrass	AGSM					3	
Slender wheatgrass	AGTR					2	
elbow grasses	PPGG	2	2			20	2
Carex	PPFF	10	10			15	10
Owyhee big sagebrush	APTR					8	
mtn big sagebrush	ARTR	30	50				30
Wyoming big sagebrush	ARTR	10	10				10
Douglas rabbitbrush	CHVI8	5	5				5
Snowberry	SYMPH	5	5				5
other shrubs	SSSS	10	10			7	10
RANGE SITE NAME OR NUMBER		P/J big sage	P/J big sage			Loamy bottom	P/J big sage
POTENTIAL PRODUCTION LBS. AC. DRY WT. FAVORABLE YEARS		900	900			2600	900
POTENTIAL PRODUCTION LBS. AC. DRY WT. NORMAL YEARS		600	600			1700	600
POTENTIAL PRODUCTION LBS. AC. DRY WT. UNFAVORABLE YEARS		300	300			800	300

9.00 ABBREVIATIONS USED PAGE 2:

10.00 FOOTNOTES PAGE 2:

APPENDIX B

RANGE SITE DESCRIPTIONS

RANGE SITE DESCRIPTION
MLRA - D-28

NEVADA

Climate:

Precipitation: Average annual range is from 5 to 12 inches.

Temperature: Annual Mean: 43°F to 47°F
Frost-free Period: 90 to 130 days
Optimum Growing Season: May 1 to July 15

Topography and Elevation:

This site occurs on flats, basins, and bottoms

Slopes vary from: 0 to 4%

Elevation is from 5,000 to 7,000 feet

Potential Native Vegetation: This is essentially a baltic rush, alkali sacaton, and inland saltgrass plant community. Several species of sedge may also be present.

Refer to the Map Unit Description for the potential plant community.

Composition is approximately 80% grass; 10% forbs; 10% shrubs.

Total annual yield air dry - Favorable and Unfavorable Years: 4,000 to 1,200 pounds per acre.

Soils: Soils most typical of this site have the following characteristics:

Surface Soil: silt loams to loams
Soil: clays to sandy loams
Permeability: slow to very slow
Depth: 60"
Available Water Capacity: high
Runoff: slow to none
Drainage: Poorly drained.

		90
Rushes	JUNCA	25
Alkali socaton	SPAI	12
Inland saltgrass	DIST	8
Sedges	CAREX	10
Alkali cordgrass	JPGR	5
Other grasses	PPGG	20
Forbs	PPFF	10
Willow	SALIX	2
Wild rose	ROSA	2
Basin big sagebrush	ARTRT	2
Other shrubs	SSSS	4

Production	#
Favorable	4000
Normal	2600
Unfavorable	1200

RANGE SITE DESCRIPTION
MLRA - D-28

NEVADA

Climate:

Precipitation: Average annual range is from 5 to 12 inches.

Temperature: Annual Mean: 44° to 54° F
Frost-free Period: 85 to 110
Optimum Growing Season: April 1 to July 30

Topography and Elevation:

This site occurs on nearly level bottoms, flats, floodplains, and basins

Slopes vary from: 0 to 4 percent

Elevation is from 4,200 to 7,000 feet

Potential Native Vegetation: This is essentially a basin wildrye, Nevada bluegrass and basin big sagebrush plant community.

Refer to the Map Unit Description for the potential plant community.

Composition is approximately 70% grass; 15% forbs; 15% shrubs.

Total annual yield air dry - Favorable and Unfavorable Years: 2,600 to 800 pounds per acre.

Soils: Soils most typical of this site have the following characteristics:

Surface Soil: variable
Subsoil: variable
Permeability: moderate to moderately rapid
Depth: more than 60 inches
Available Water Capacity: moderate
Runoff: slow to moderate
Drainage: well

		%
Basin wildrye	ELCI2	40
Nevada bluegrass	PONE	5
Western wheatgrass	AGSM	3
Slender wheatgrass	AGTR	2
Other grasses	PPGG	20
Forbs	PPFF	15
Basin big sagebrush	ARTRT	8
Other shrubs	SSSS	7

Production	#
Favorable	2600
Normal	1700
Unfavorable	800

RANGE SITE DESCRIPTION
MLRA - 28

NEVADA

Climate:

Precipitation: Average annual range is from 5 to 12 inches.

Temperature: Annual Mean: 43 to 47 F.
Frost-free Period: 90 to 130 days
Optimum Growing Season: April 1 to June 15

Topography and Elevation:

This site occurs in drainageways, canyon bottoms, water courses, arroyos, and washes

Slopes vary from: 0 to 30 percent but are usually 2 to 15 percent

Elevation is from 4800 to 7000 feet

Potential Native Vegetation: This site is frequently disturbed by flooding which prevents development of a predictable stable plant community. Characteristic plants are basin wildrye, Wyoming and basin big sagebrush, and rabbitbrush.

Refer to the Map Unit Description for the potential plant community.

Composition is approximately 45% grass; 15% forbs; 40% shrubs.

Total annual yield air dry - Favorable and Unfavorable Years: 700 to 300 pounds per acre.

Soils: Soils most typical of this site have the following characteristics:

Surface Soil: gravelly loam
Subsoil: sandy loam
Permeability: moderately rapid to rapid
Depth: more than 60 inches
Available Water Capacity: low
Runoff: medium to slow
Drainage: well

		%
Basin wildrye	ELCI2	12
Alkali sacaton	SPAI	8
Needle and thread	STCO4	5
Other grasses	PPGG	20
Forbs	PPFF	15
Basin big sagebrush	ARTRT	10
Wyoming big sagebrush	ARTRW.	5
Green rabbitbrush	CHRYS9	10
Ephedia	EPHED	5
Fourwing saltbush	ATCA2	5
Other shrubs	SSSS	5

Production	#
Favorable	700
Normal	500
Unfavorable	300

RANGE SITE DESCRIPTION
MLRA - 28

NEVADA

Climate:

Precipitation: Average annual range is from 8 to 12 inches.

Temperature: Annual Mean: 44° to 50° F.
Frost-free Period: 85 to 130 days
Optimum Growing Season: April 1 to June 1

Topography and Elevation:

This site occurs in valleys and on terraces, benches, fans, and slopes

Slopes vary from: 0 to 30 percent, but usually from 0 to 15 percent

Elevation is from 5000 to 7000 feet

Potential Native Vegetation: This is essentially a black sagebrush, bud sagebrush, Indian ricegrass, needle and thread and bluebunch wheatgrass plant community

Refer to the Map Unit Description for the potential plant community.

Composition is approximately 40% grass; 10% forbs; 50% shrubs.

Total annual yield aid dry - Favorable and Unfavorable Years: 650 to 175 pounds per acre.

Soils: Soils most typical of this site have the following characteristics:

Surface Soil: sandy loam to loam; may be cobbly or gravelly
Subsoil: usually contains a restrictive layer which limits rooting depth
Permeability: moderate to moderately slow
Depth: usually less than 40 inches
Available Water Capacity: low
Runoff: rapid
Drainage: well

		%
Indian ricegrass	ORHY	12
Needle and thread	STCO4	10
Bluebunch wheatgrass	AGSP	2
Pine bluegrass	POSC	6
Other grasses	PPGG	10
Forbs	PPFF	15
Black sagebrush	ARARN	25
Bud sagebrush	ARSP5	7
Winterfat	EULA5	7
Fourwing saltbush	ATCA2	3
Douglas Rabbitbrush	CHVI8	2
Other shrubs	SSSS	6

Production	#
Favorable	650
Normal	350
Unfavorable	175

RANGE SITE DESCRIPTION
MLRA - 28

NEVADA

Climate:

Precipitation: Average annual range is from 8 to 12 inches.

Temperature: Annual Mean: 44-50°F
Frost-free Period: 85-130 days
Optimum Growing Season: April 15 to July 1

Topography and Elevation:

This site occurs on hills, buttes, knolls, slopes and gently sloping ridges.

Slopes vary from: 15 to 75%

Elevation is from 5000 to 7000 feet

Potential Native Vegetation: This is essentially a Wyoming big sagebrush-bluebunch wheatgrass-needle and thread grass community

Refer to the Map Unit Description for the potential plant community.

Composition is approximately 35% grass; 15% forbs; 50% shrubs.

Total annual yield air dry - Favorable and Unfavorable Years: 550 to 175 pounds per acre.

Soils: Soils most typical of this site have the following characteristics:

Surface Soil: gravelly, cobbly or stony loams
Subsoil: gravelly sandy loams to loams
Permeability: moderate
Depth: 20 to 36"
Available Water Capacity: low
Runoff: rapid
Drainage: well drained

Indian ricegrass	ORHY	10
Needle and thread	STCO4	8
Bluebunch wheatgrass	AGSP	4
Basin wildrye	ELCI2	4
Other grasses	PPGG	9
Forbs	PPFF	15
Wyoming big sagebrush	ARTRW	20
Black sagebrush	ARARN	2
Fourwing saltbush	ATCA2	5
Ephedra	EPHED	5
Other shrubs	SSSS	18

Production	#
Favorable	550
Normal	300
Unfavorable	175

RANGE SITE DESCRIPTION
MLRA - 28

NEVADA

Climate:

Precipitation: Average annual range is from 8 to 12 inches.

Temperature: Annual Mean: 44° to 50°F.
Forst-free Period: 85 to 130 days
Optimum Growing Season: April 15 to July 1

Topography and Elevation:

This site occurs on flats, basins, and fans

Slopes vary from: 0 to 15% but are usually less than 8%

Elevation is from 5000 to 7000 feet

Potential Native Vegetation: This is essentially a winterfat-Indian ricegrass plant community

Refer to the Map Unit Description for the potential plant community.

Composition is approximately 25% grass; 10% forbs; 65% shrubs.

Total annual yield air dry - Favorable and Unfavorable Years: 500 to 150 pounds per acre.

Soils: Soils most typical of this site have the following characteristics:

Surface Soil: gravelly loams to silt loams
Subsoil: moderately fine to coarse
Permeability: moderately slow
Depth: more than 60 inches
Available Water Capacity: Low to moderate
Runoff: slow
Drainage: well

		%
Indian ricegrass	ORHV	12
Needle and thread	STCO4	4
Bottle brush squirrel tail	SIHY	2
Other grasses	PPGG	7
Forbs	PPFF	10
Winterfat	EULA5	35
Red ~~Red~~ sagebrush	ARSP5	10
Fourwing saltbush	ATCA2	5
Other shrubs	SSSS	15

Production	#
Favorable	500
Normal	300
Unfavorable	150

RANGE SITE DESCRIPTION
MLRA - 28

NEVADA

Climate:

Precipitation: Average annual range is from 8 to 12 inches.

Temperature: Annual Mean: 44° to 50°
Frost-free Period: 85 to 130 days
Optimum Growing Season: April 1 to June 1

Topography and Elevation:

This site occurs on buttes, hills, slopes, hogbacks, ridges, and knolls

Slopes vary from: 15 to 75 percent

Elevation is from 5000 to 7000 feet

Potential Native Vegetation: This is essentially a black sagebrush, cliff-rose, Indian ricegrass, needle and thread, and bluebunch wheatgrass plant community

Refer to the Map Unit Description for the potential plant community.

Composition is approximately 35% grass; 15% frobs; 50% shrubs.

Total annual yield air dry - Favorable and Unfavorable Years: 500 to 175 pounds per acre.

Soils: Soils most typical of this site have the following characteristics:

Surface Soil: loams which may be gravelly, cobbly, or stony
Subsoil: variable
Permeability: moderate to moderately slow
Depth: usually less than 20 inches
Available Water Capacity: low
Runoff: very rapid
Drainage: well

Indian ricegrass	ORHY	12
Needle and thread	STCO4	8
Bottlebrush squirreltail	SIHY	2
Pine bluegrass	POSC	6
Other grasses	PPGG	7
Forbs	PPFF	15
Black sagebrush	ARARN	20
Fourwing saltbush	ATCA2	5
Bud sagebrush	ARSP5	3
Ephedia	EPHED	5
Douglas rabbitbrush	CHVI8	2
Other shrubs	SSSS	15

Production	#
Favorable	500
Normal	270
Unfavorable	175

RANGE SITE DESCRIPTION
MLRA - D-28

NEVADA

Climate:

Precipitation: Average annual range is from 12 to 16 inches.
Temperature: Annual Mean: 40° to 45°F
Frost-free Period: 70 to 95 days
Optimum Growing Season: May 15 to July 15

Topography and Elevation:

This site occurs on enclosed basins and flats that are periodically flooded to a shallow depth for a portion of the year.

Slopes vary from: 0 to 2%

Elevation is from 5700 to 7500 feet

Potential Native Vegetation: This is potentially a silver sagebrush plant community with understory grasses that are able to withstand the inundation.

Refer to the Map Unit Description for the potential plant community.

Composition is approximately 30% grass; 10% forbs; 60% shrubs.

Total annual yield air dry - Favorable and Unfavorable Years: 1200 to 500 pounds per acre.

Soils: Soils most typical of this site have the following characteristics:

Surface Soil: silt loams to clays
Subsoil: same
Permeability: slow
Depth: 60"+
Available Water Capacity: moderate to high
Runoff: none
Drainage: poor

western wheatgrass	AGSM	15
thickspike wheatgrass	AGDA	10
basin wildrye	ELC12	5
rushes	JUNCU	2
other perennial grasses	PPGG	3
bottlebrush squirreltail	SIHY	35
other perennial forbs	PPFF	10
other annual forbs	AAFF	5
silver sagebrush	ARCA13	40
Wyoming big sagebrush	ARTRV	5
basin big sagebrush	ARTR2	3
other shrubs	SSSS	2
		50

Production	#
Favorable	1200
Normal	800
Unfavorable	500

RANGE SITE DESCRIPTION
MLRA - D-28

NEVADA

Climate:

Precipitation: Average annual range is from 12 to 18 inches.

Temperature: Annual Mean: 39-44°F
Frost-free Period: 60-90 days
Optimum Growing Season: May 1 to July 15

Topography and Elevation:

This site occurs on mountain side slopes and broad mountain ridges on all exposures.

Slopes vary from: 4 to 50% but are usually 8 to 30%

Elevation is from 7500 to 9400 feet

Potential Native Vegetation: This is potentially a low sagebrush-Idaho fescue plant community, with significant amounts of bluebunch wheatgrass.

Refer to the Map Unit Description for the potential plant community.

Composition is approximately 50% grass; 20% forbs; 30% shrubs.

Total annual yield air dry - Favorable and Unfavorable Years: 900 to 400 pounds per acre.

Soils: Soils most typical of this site have the following characteristics:

Surface Soil: stony loams to clay loams
Subsoil: clay loams to gravelly clays
Permeability: slow
Depth: 10-40"
Available Water Capacity: moderate
Runoff: moderate to high
Drainage: moderate to slow

		%
Idaho fescue	FEID	20
bluebunch wheatgrass	AGSP	10
basin wildrye	ELCE2	5
Letterman needlegrass	STLE4	5
Thurber needlegrass	STTH2	5
other perennial grasses bottlebrush squirreltail thickspike wheatgrass	PPGG	10
other perennial forbs antennaria phlox lupine	PPFF	10
other annual forbs sunflower buckwheat	AAFF	5
low sagebrush	ARAR8	20
low rabbitbrush	CHVI8	5
other shrubs gilia horsebrush	SSSS	5

Production	#
Favorable	900
Normal	600
Unfavorable	400

RANGE SITE DESCRIPTION
MLRA - 28

NEVADA

Climate:

Precipitation: Average annual range is from 11 to 16 inches but is usually 11 to 13 inches

Temperature: Annual Mean: 41° to 47° F
Frost-free Period: 70 to 115 days
Optimum Growing Season: April 15 to July 1

Topography and Elevation:

This site occurs on diverse topographic positions and various exposures

Slopes usually vary from: 2 to 50% but may be greater

Elevation is usually from 5700 to 6500 feet but may range up to 8200 feet

Potential Native Vegetation: This is essentially a plant community of black sagebrush with an understory of other shrubs, grasses, and forbs. There is a sparse overstory of Utah juniper.

Refer to the Map Unit Description for the potential plant community.

Composition is approximately 30% grass; 15% forbs; 55% shrubs.

Total annual yield air dry - Favorable and Unfavorable Years: 500 to 250 pounds per acre.

Soils: Soils most typical of this site have the following characteristics:

Surface Soil: dark colored cobbly or gravelly loams
Subsoil: with restrictive layers in root zone; high in lime
Permeability: moderate
Depth: shallow to moderately deep
Available Water Capacity: medium
Runoff: moderate
Drainage: moderate

bluebunch wheatgrass	AGSP	10
Thurber needlegrass	STTH2	5
needle and thread	STCO4	5
Indian ricegrass	ORHY	2
sandberg bluegrass	POSE	3
other perennial grasses basin wildrye bottlebrush squirreltail	PPGG	5
other perennial forbs globemallow prices plume	PPFF	10
other annual forbs buckwheat	AAFF	5
black sagebrush	ARARN	20
antelope bitterbrush	PUTR2	5
littleloaf mountain mahogany	CELE12	5
cliffrose	COMES	5
ephedra	EPHED	5
other shrubs buckwheat fourwing saltbrush skeletonweed big sagebrush cacti rabbitbrush	SSSS	10
Utah juniper	JUOS	5

Production	#
Favorable	500
Normal	300
Unfavorable	250

RANGE SITE DESCRIPTION
MLRA - D-28

NEVADA

Climate:

Precipitation: Average annual range is from 8 to 10 inches.

Temperature: Annual Mean: 45-49° F
Frost-free Period: 85-115 days
Optimum Growing Season: April 15 to July 1

Topography and Elevation:

This site occurs on alluvial fans and basin fill plains.

Slopes vary from: 0 to 15%

Elevation is from 5300 to 6500 feet

Potential Native Vegetation: This is potentially a Wyoming big sagebrush-Indian ricegrass plant community, with Thumber needlegrass and pine bluegrass also being significant.

Refer to the Map Unit Description for the potential plant community.

Composition is approximately 40% grass; 15% forbs; 45% shrubs.

Total annual yield air dry - Favorable and Unfavorable Years: 800 to 400 pounds per acre.

Soils: Soils most typical of this site have the following characteristics:

Surface Soil: gravelly sandy loam to silt loam
Subsoil: gravelly sandy loam to clay loam
Permeability: moderate
Depth: 22-60
Available Water Capacity: moderate to low
Runoff: medium
Drainage: well

Indian ricegrass	ORHY	12
Needle & thread	STCO4	7
Pine bluegrass	POSC	7
Thurber needlegrass	STTH2	4
Bluebunch wheatgrass	AGSP	3
Bottlebrush squirreltail	SIHY	3
Sandberg bluegrass	POSE	2
Galleta	HIJA	2
		40%
Forbs		15%
Wyoming big sagebrush	ARTRW	25
Fourwing saltbush	ATCA2	8
Spiny Hapsage	GRSP	4
Douglas rabbitbrush	CHVI8	2
Winterfat	EULA5	2
Nevada Ephedra	EPNE	2
Spineless horsebrush	TECA2	2
		45%

Prod: 800# favorable years
400# unfavorable years

RANGE SITE DESCRIPTION
MLRA - 25

NEVADA

Climate:

Precipitation: Average annual range is from 8 to 16 inches.

Temperature: Annual Mean: 42° to 47° F
Frost-free Period: 80 to 105 days
Optimum Growing Season: May 1 to August 15

Topography and Elevation:

This site occurs along perennial streams, stream terraces, valley bottoms, and around localized seeps and springs.

Slopes vary from: 0 to 4%

Elevation is from 4000 to 8000 feet

Potential Native Vegetation: This is potentially a tufted hairgrass site. Nevada bluegrass, alpine timothy, Sierra clover, and meadow sedges are important associated plants.

Refer to the Map Unit Description for the potential plant community.

Composition is approximately 70% grass; 25% forbs; 5% shrubs.

Total annual yield air dry - Favorable and Unfavorable Years: 2000 to 1000 pounds per acre.

Soils: Soils most typical of this site have the following characteristics:

Surface Soil: medium
Subsoil: variable
Permeability: moderate
Depth: greater than 60 inches
Available Water Capacity: high
Runoff: slow to very slow
Drainage: poor to very poor

		%
Tufted hairgrass	DECA5	50
Nevada bluegrass	PONE3	7
Alpine Timothy	PHAL2	3
Sedges	CAREX	3
Rushes	JUNCU	3
Other grasses	PPGG	4
Forbs	PPFF	25%
Willow	SALIX	2
Wild rose	ROSA	1
Silver sagebrush	ARCA13	1
Other shrubs	SSSS	1

Production	#
Favorable	2000
Normal	1700
Unfavorable	1000

WOODLAND SITE DESCRIPTION
MLRA - D-28

NEVADA

Climate:

Precipitation: Average annual range is from 16 to 22 inches.

Temperature: Annual Mean: 36 to 42° F
Frost-free Period: 50 to 70 days
Optimum Growing Season: May 15 to July 30

Topography and Elevation:

This site occurs on high elevation mountain side slopes and concave basins, usually with northerly exposures.

Slopes vary from: 15 to 50%, but are usually 15 to 30%

Elevation is from 6500 to 9000 feet

Potential Native Vegetation: This is potentially an aspen-dominated site with trees 20 to 40 feet high and a canopy cover ranging from 30 to 70%. Understory vegetation is usually sparse.

Refer to the Map Unit Description for the potential plant community.

Composition is approximately 45% grass; 15% forbs; 40% shrubs and trees.

Total annual yield air dry - Favorable and Unfavorable Years: 1200 to 2400 pounds per acre.

Soils: Soils most typical of this site have the following characteristics:

Surface Soil: gravelly loams to silt loams
Subsoil: same, except a weak orgillic horizon may or may not occur
Permeability: moderate
Depth: 20 - 60"
Available Water Capacity: moderate to high
Runoff: low
Drainage: well

Understory

Mtn. brome	BRMA4	15
Slender wheatgrass	AGTR	7
Columbia needlegrass	STCO3	5
Bluebunch wheatgrass	AGSP	3
Bottlebrush squirreltail	SIHY	2
Pine bluegrass	POSC	5
Other grasses	PPGG	3
Forbs	PPFF	15
Aspen reproduction	POTR5	20
Snowberry	SYMPH	7
Serviceberry	AMAL	5
Currant	RIBES	3
Mtn. big sagebrush	ARTRV	3
Other shrubs	SSSS	2

Production	#
Favorable	3000
Normal	2500
Unfavorable	2000

WOODLAND SITE DESCRIPTION
MLRA - D-28

NEVADA

Climate:

Precipitation: Average annual range is from 11 to 16 inches.

Temperature: Annual Mean: 41° to 47°
Frost-free Period: 70 to 115 days
Optimum Growing Season: April 15 to July 1

Topography and Elevation:

This site occurs on a wide variety of topographic positions, exposures, and slopes.

Slopes vary from: 2 to 50%

Elevation is from 5700 to 8200 feet

Potential Native Vegetation: This is potentially a pinyon pine/Utah Juniper plant community with an understory of black sagebrush and Thurber needlegrass and bluebunch wheatgrass.

Refer to the Map Unit Description for the potential plant community.

Composition is approximately 30% grass; 10% forbs; 60% shrubs.

Total annual yield air dry - Favorable and unfavorable Years: 725 to 250 pounds per acre.

Soils: Soils most typical of this site have the following characteristics:

Surface Soil: stony, cobbly, or gravelly loams
Subsoil: loams to clays, with hardpan or restrictive layer at 15-24"
Permeability: moderate
Depth: 15 to 24"
Available Water Capacity: low to moderate
Runoff: rapid
Drainage: well

Understory		
Thurber needlegrass	STTH2	12
Bluebunch wheatgrass	AGSP	2
Indian ricegrass	ORHY	10
Bottlebrush squirreltail	SIHY	2
Other grasses	PPGG	4
Forbs	PPFF	10
Black sagebrush		40
Ephedia		5
Douglas rabbitbrush		5
Other shrubs		10

Production	#
Favorable	725
Normal	500
Unfavorable	250

WOODLAND SITE DESCRIPTION
MLRA - D-28

NEVADA

Climate:

Precipitation: Average annual range is from 11 to 16 inches.

Temperature: Annual Mean: 41° to 47° F
Frost-free Period: 70 to 115 days
Optimum Growing Season: April 15 to July 1

Topography and Elevation:

This site occurs on a wide variety of topographic positions, exposures, and slopes.

Slopes vary from: 2 to 50%

Elevation is from 5700 to

Potential Native Vegetation: This is potentially a pinyon pine/Utah Juniper plant community with an understory of Wyoming or mountain big sagebrush and Thurber needlegrass or bluebunch wheatgrass.

Refer to the Map Unit Description for the potential plant community.

Composition is approximately 30% grass; 10% forbs; 60% shrubs.

Total annual yield air dry - Favorable and Unfavorable Years: 300 to 900 pounds per acre.

Soils: Soils most typical of this site have the following characteristics:

Surface Soil: sandy loams to clay loams, may be stony
Subsoil: loams to clays, gravelly
Permeability: moderate
Depth: 20-60"
Available Water Capacity: moderate
Runoff: moderate to rapid
Drainage: well

Understory		%
Thurber needlegrass	STTH2	15
Bluebunch wheatgrass	AGSP	5
Pine bluegrass	POSC	6
Basin wildrye	ELCI2	2
Other grasses	PPGG	2
Forbs	PPFF	10
Mtn. big sagebrush		30
Wyoming big sagebrush		10
Douglas rabbitbrush		5
Snowberry		5
Other shrubs		10

Production	#
Favorable	900
Normal	600
Unfavorable	300

RANGE SITE DESCRIPTION
MLRA - D-28

NEVADA

Climate:

Precipitation: Average annual range is from 12 to 25 inches.

Temperature: Annual Mean: 37° to 44° F
Frost-free Period: 50 to 115 days
Optimum Growing Season: May 15 to Aug. 15

Topography and Elevation:

This site occurs on basins or bottom lands which are occasionally flooded or are influenced by gresh water springs.

Slopes vary from: 0 to 2%

Elevation is from 5700 to 11,300 feet

Potential Native Vegetation: This is potentially a baltic rush-sedge-rhizomatous wheatgrass plant community, with scattered plants of silver sagebrush

Refer to the Map Unit Description for the potential plant community.

Composition is approximately 50% grass; 20% forbs; 30% shrubs.

Total annual yield air dry - Favorable and Unfavorable Years: 3200 to 1400 pounds per acre.

Soils: Soils most typical of this site have the following characteristics:

Surface Soil: clay loams to clays
Subsoil: clay
Permeability: slow
Depth: 35-60"
Available Water Capacity: moderate to high
Runoff: none
Drainage: poor

Baltic rush	JUBA	8
Sedge	CAREX	5
Western wheatgrass	AGSM	15
Thickspike wheatgrass	AGDA	5
Bluegrasses	POA	5
Creeping wildrye	ELTR3	10
Other grasses	PPGG	2
Forbs	PPFF	20
Silver sagebrush	ARCA13	15
Rubber rabbitbrush	CHNA	5
Other shrubs	SSSS	10

Production	#
Favorable	
Normal	
Unfavorable	

RANGE SITE DESCRIPTION
MLRA - D-28

NEVADA

Climate:

Precipitation: Average annual range is from 14 to 18 inches.

Temperature: Annual Mean: 41 to 43° F
Frost-free Period: 50 - 70 days
Optimum Growing Season: May 15 to Aug. 1

Topography and Elevation:

This site occurs on upland mountain slopes above drainage ways and in inset mountain valleys and basins. It occurs on northerly slopes at lower elevations, but on all exposures at the higher elevations.

Slopes vary from: 4 to 50% but are mostly 4 - 30%

Elevation is from 7500 to 9500 feet

Potential Native Vegetation: This is potentially a chokecherry-snowberry-Idaho fescue plant community.

Refer to the Map Unit Description for the potential plant community.

Composition is approximately 35% grass; 20% forbs; 45% shrubs.

Total annual yield air dry - Favorable and Unfavorable Years: 1600 to 800 pounds per acre.

Soils: Soils most typical of this site have the following characteristics:

Surface Soil: loams to silt loams, may be stony or very stony.
Subsoil: grav. silt loams to clay loams
Permeability: moderate to slow
Depth: 20 to 60"
Available Water Capacity: moderate to high
Runoff: moderate
Drainage: well

Grasses		
Idaho fescue	FEID	10
Mtn. brome	BRMA4	6
Bluebunch wheatgrass	AGSP	5
Nevada bluegrass	PONE3	3
Basin wildrye	ELCI2	2
Slender wheatgr.	AGTR	2
Letterman needlegr.	STLE4	2
Columbia needlegr.	STCO3	2
Sedge	CAREX	1
Other perennial grasses	PPGG	2
		35%

Browse		
Chokecherry	PRVI	20
Snowberry	SYMPH	10
Mtn. big sagebr.	ARTRV	5
Lanceleaf rabbitbrush	CHVIL	3
Serviceberry	AMAL2	3
Barberry	BERE	2
Currant	RIBES	2
		45%

Forbs

Lupine	LUPINE	4
Hawksbeard	CRAC2	3
Arrowleaf balsamroot	BASA3	2
Senecio	SENEC	2
Horsemint	AGUR	2
Stoneseed	LIRU4	2
Eriogonum	ERIOG	1
Geranium	GERAN	1
Other perennials	PPFF	3
		20%

Prod. - 1600# favorable years
800# unfavorable years

RANGE SITE DESCRIPTION
MLRA - D-28

NEVADA

Climate:

Precipitation: Average annual range is from 12 to 18 inches.

Temperature: Annual Mean: 38 to 43° F
Frost-free Period: 40 to 60 days
Optimum Growing Season: May 1 to July 15

Topography and Elevation:

This site occurs on strong convex mountain tops, ridges, and shoulder slopes.

Slopes vary from: 10 to 70% but are usually 15-50%

Elevation is from 7,000 to 10,500 feet

Potential Native Vegetation: This is potentially a low sagebrush-Idaho fescue-bluegrass plant community. Some areas will also have black sagebrush. The sagebrush usually is only 4-10" in height.

Refer to the Map Unit Description for the potential plant community.

Composition is approximately 40% grass; 20% forbs; 40% shrubs.

Total annual yield air dry - Favorable and Unfavorable Years: 400 to 200 pounds per acre.

Soils: Soils most typical of this site have the following characteristics:

Surface Soil: sandy loams to clay loams, usually stony or extremely stony.
Subsoil: same, but usually gravelly.
Permeability: rapid to moderate
Depth: 4 - 30"
Available Water Capacity: low to moderate
Runoff: moderate to high
Drainage: well

Idaho fescue	FEID	15
bluebunch wheatgrass	AGSP	10
Indian ricegrass	ORHY	5
sandberg bluegrass	POSE	5
Letterman needlegrass	STLE4	2
bottlebrush squirreltail	SIHY	3
other perennial grasses	PPGG	10
western wheatgrass		
bluegrama		
Thurber needlegrass		
goldenweed	HAPLO2	5
other perennial forbs	PPFF	5
phlox		
other annual forbs	AAFF	5
low sagebrush	ARAR8	20
black sagebrush	ARARN	5
low rabbitbrush	CHVI8	3
horsebrush	TETRA	2
other shrubs	SSSS	5
Wyoming big sagebrush		
mountain big sagebrush		
buckwheat		
gilia		
horsebrush		
cacti		
mtn. mahogany		

Production	#
Favorable	400
Normal	300
Unfavorable	200

RANGE SITE DESCRIPTION
MLRA - D-28

NEVADA

Climate:

Precipitation: Average annual range is from 16 to 22 inches.

Temperature: Annual Mean: 38° to 44° F
Frost-free Period: 50 to 70 days
Optimum Growing Season: May 15 to Aug. 1

Topography and Elevation:

This site occurs on gently rolling to very steep mountain slopes and basins.

Slopes vary from: 4 to 75% but on usually 15 to 50%.

Elevation is from 7400 to 9400 feet

Potential Native Vegetation: This is potentially an open stand of mountain mahogany with an understory of mountain and/or subalpine big sagebrush and perennial bunchgrasses.

Refer to the Map Unit Description for the potential plant community.

Composition is approximately 38% grass; 12% forbs; 50% shrubs.

Total annual yield air dry - Favorable and Unfavorable Years: 1400 to 600 pounds per acre.

Soils: Soils most typical of this site have the following characteristics:

Surface Soil: gravelly sandy loams to gravelly silt loams
Subsoil: gravelly sandy loams to clay loams
Permeability: moderate
Depth: 15 to 40"
Available Water Capacity: moderate
Runoff: moderate
Drainage: well

Mahogany Savanna

Grasses

Idaho fescue	FEID	9
Bluebunch wheatgrass	AGSP	5
Western needlegrass	STOC2	5
Letterman needlegrass	STLE4	4
Thumber needlegrass	STTH2	4
Pine bluegrass	POSC	4
Junegrass	KOCR	2
Other perennial grass	PPGG	5
		38%

Basin wildrye
Thickspike wheatgrass
Dryland sedge
Sandberg shegrass
Squirreltail

Browse

Mtn. Mahogany	CELE2
Subalpine big sagebrush	ARTRVS
Mtn. big sagebrush	ARTRV
Snowberry	SYMPH
Lanceleaf rabbitbrush	CHVII
Other shrubs	SSSS

Erlogonum
Low sagebrush
Common prickleygilia
Douglas rabbitbrush

Forbs

Perennial forbs	PPFF	12

Arrowleaf balsam root
Hawks beard
Phlox
Buckwheat
Lupine

Production - 1400# favorable years
600# unfavorable years

RANGE SITE DESCRIPTION
MLRA - D-28

NEVADA

Climate:

Precipitation: Average annual range is from 16 to 22 inches.

Temperature: Annual Mean: 39° to 44° F
Frost-free Period: 60 - 90 days
Optimum Growing Season: May 15 to Aug. 1

Topography and Elevation:

This site occurs on mountain tops, hillsides, canyon slopes and ridges.

Slopes vary from: 2-50% but are usually 8-30%.

Elevation is from 6500 to 9500 feet

Potential Native Vegetation: This is potentially a mountain mahogany plant community, moderately dense, with occasional openings scattered throughout.

Refer to the Map Unit Description for the potential plant community.

Composition is approximately 25% grass; 15% forbs; 65% shrubs.

Total annual yield air dry - Favorable and Unfavorable Years: 1600 to 800 pounds per acre.

Soils: Soils most typical of this site have the following characteristics:

Surface Soil: dark colored, stony sandy loams to silt loams
Subsoil: same, except for an occasional clay loam
Permeability: moderate
Depth: 15 - 40"
Available Water Capacity: moderate
Runoff: well

Bluebunch wheatgrass	AGSP	5
Pine bluegrass	POSC	5
Bottlebrush squirreltail	SIHY	2
Thurbers needlegrass	STTH2	5
Indian ricegrass	ORHY	2
Other grasses	PPGG	6
Forbs	PPFF	15
Curlleaf Mtn. Mahogany	CELE3	53
Mtn. big sagebrush	ARTRV	3
Snowberry	SYMPH	3
Douglas rabbitbrush	CHVI8	2
Other shrubs	SSSS	4

Production	#
Favorable	1600
Normal	1200
Unfavorable	800

RANGE SITE DESCRIPTION
MLRA - D-28

NEVADA

Climate:

Precipitation: Average annual range is from 16 to 22 inches.

Temperature: Annual Mean: 39° to 42° F
Frost-free Period: 60 to 90 days
Optimum Growing Season: May 15 to Aug. 1

Topography and Elevation:

This site occurs on high elevation colluvial mountain slopes and bains on all exposures.

Slopes vary from: 4 to 50%

Elevation is from 7800 to 9500 feet

Potential Native Vegetation: This is potentially a mountain big sagebrush-Idaho fescue-mountain biome plant community

Refer to the Map Unit Description for the potential plant community.

Composition is approximately 60% grass; 15% forbs; 25% shrubs.

Total annual yield air dry - Favorable and Unfavorable Years: 1400 to 400 pounds per acre.

Soils: Soils most typical of this site have the following characteristics:

Surface Soil: loams, may be stony to extremely stony.
Subsoil: loam to clay loam, usually gravelly.
Permeability: moderate to slow
Depth: 22 to 60"
Available Water Capacity: moderate to high
Runoff: moderate
Drainage: well

Idaho fescue	FEID	20
mountain bromegrass	BRMA4	10
Columbia needlegrass	STCO3	5
Letterman needlegrass	STLE4	5
basin wildrye	ELCI2	5
bluebunch wheatgrass	AGSP	5
other perennial grasses	PPGG	5
		55
prairie junegrass bottlebrush squirreltail thickspike wheatgrass slender wheatgrass		
other perennial forbs	PPFF	10
phlox paintbrush stoneseed monksherd bluebells		
other annual forbs	AAFF	5
buckwheat aster locoweed		
mountain big sagebrush	ARTRV	15
snowberry	SYMPH	5
serviceberry	AMAL2	3
low rabbitbrush	CHVI8	2
other shrubs	SSSS	5
mtn. mahogany horsebrush cacti		

Production	
Favorable	1400
Normal	800
Unfavorable	400

RANGE SITE DESCRIPTION
MLRA - D 28

NEVADA

Climate:

Precipitation: Average annual range is from 12 to 16 inches.

Temperature: Annual Mean: 39 to 44° F
Frost-free Period: 70 - 110 days
Optimum Growing Season: May 1 to July 15

Topography and Elevation:

This site occurs on medium to high elevation colluvial mountain slopes and basins on all exposures, on concave positions.

Slopes vary from: 4 - 30% but are usually 4 - 15%

Elevation is from 6500 to 8000 feet

Potential Native Vegetation: This is potentially a mountain big sagebrush-bluebunch wheatgrass-Idaho fescue plant community. Some areas in the lower end of the precipitation zone may have Wyoming big sagebrush.

Refer to the Map Unit Description for the potential plant community.

Composition is approximately 55% grass; 15% forbs; 30% shrubs.

Total annual yield air dry - Favorable and Unfavorable Years: 1100 to 700 pounds per acre.

Soils: Soils most typical of this site have the following characteristics:

Surface Soil: loams, stony loams, or very stony loams.
Subsoil: loams to clay and may be gravelly.
Permeability: moderate
Depth: 30-60"
Available Water Capacity: moderate to high
Runoff: moderate
Drainage: well

bluebunch wheatgrass	AGSP	20
Idaho fescue	FEID	10
Thurber needlegrass	STTH2	5
sandberg bluegrass	POSE	5
Pine bluegrass	POSC	5
western wheatgrass	AGSM	2
basin wildrye	ELCI2	3
other perennial grasses	PPGG	5
bottlebrush squirreltail		
thickspike wheatgrass		
Indian ricegrass		
prairie junegrass		
pine bluegrass		
sedge		
bluegama		
other perennial forbs	PPFF	10
phlox		
globemallow		
other annual forbs	AAFF	5
buckwheat		
locoweed		
mountain big sagebrush	ARTRV	10
Wyoming big sagebrush	ARTRW	5
serviceberry	AMAL2	5
Snowberry		
low rabbitbrush	CHVI8	2
horsebrush	TETRA3	3
other shrubs	SSSS	5
mtn. mahogany		
gilion		
rubber rabbitbrush		
elderberry		
ephedra		
cacti		
low sagebrush		
black sagebrush		
basic big sagebrush		
buckwheat		

Production

Favorable	1100
Normal	900
Unfavorable	700

RANGE SITE DESCRIPTION
MLRA - D-28

NEVADA

Climate:

Precipitation: Average annual range is from 10 to 12 inches.

Temperature: Annual Mean: 40-45° F
Frost-free Period: 75 to 95 days
Optimum Growing Season: April 15 to July 1

Topography and Elevation:

This site occurs on upper fans and terraces and on lower slopes of rolling hills.

Slopes vary from: 4 to 30 percent

Elevation is from 6400 to 7300 feet

Potential Native Vegetation: This is essentially a Wyoming and/or mountain big sagebrush-bluebunch wheatgrass plant community. The mountain sage will occur on the more moist soils, while Wyoming sagebrush will dominate the drier soils.

Refer to the Map Unit Description for the potential plant community.

Composition is approximately 50% grass; 15% forbs; 35% shrubs.

Total annual yield air dry - Favorable and Unfavorable Years: 900 to 500 pounds per acre.

Soils: Soils most typical of this site have the following characteristics:

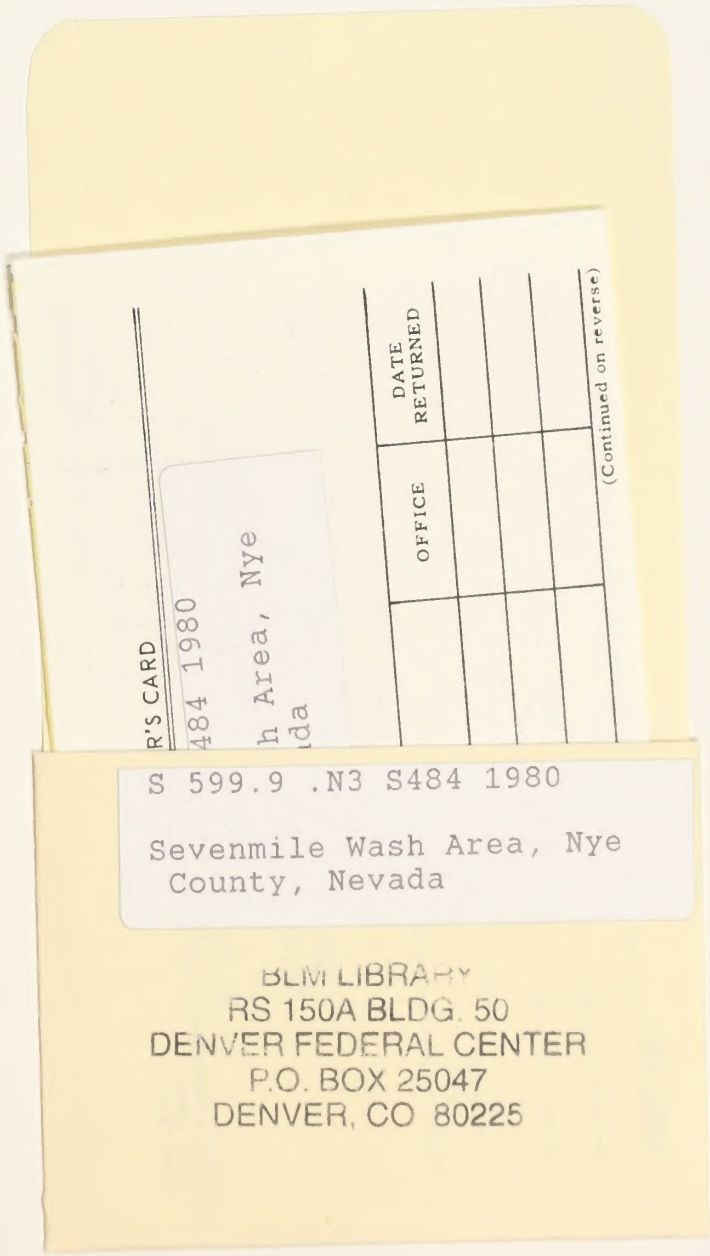
Surface Soil: stony sandy loam to stony silt loams
Subsoil: gravelly sandy loams to clay
Permeability: moderate
Depth: 22-60"
Available Water Capacity: moderate
Runoff: moderate
Drainage: well

Loamy 10-12"

Bluebunch wheatgrass	AGSP	20
Thurber needlegrass	STTH2	15
Indian ricegrass	ORHY	5
Pine bluegrass	POSC	2
Basin wildrye	ELCI2	2
Sandberg bluegrass	POSE	2
Bottlebrush squirreltail	SIHY	2
		50%
Forbs		15%
Wyoming big sagebrush and/or	ARTRW	
Mtn. big sagebrush	ARTRV	25
Douglas rabbitbrush	CHVI8	2
Rubber rabbitbrush	CHNA	2
Serviceberry	AMAL2	2
Spineless horsebrush	TECA2	1
		35%

Orid: 900# favorable years
500# unfavorable years

Bureau of Land Management
Library
Bldg. 50, Denver Federal Center
Denver, CO 80225

BLM LIBRARY
RS 150A BLDG. 50
DENVER FEDERAL CENTER
P.O. BOX 25047
DENVER, CO 80225

Bureau of Land Management
Library
Bldg. 50, Denver Federal Center
Denver, CO 80225